Public Utilities

Volume 56 No. 6 September 15, 1955

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ARTICLES

FEATURE SECTIONS

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Indiana and Michigan Electric Co. on the American Gas and Electric System—
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Niagara Mohawk Power Corporation.

9454 SCHILLER
Public Service Co. of New Hampshire—
Two B&W-built Mercury Boilers.

9510 DUNKIRK
Niagara Mohawk Power Corporation.

9540 J. R. WHITING
Consumers Power—
Three B&W Radiant Reheat Boilers.

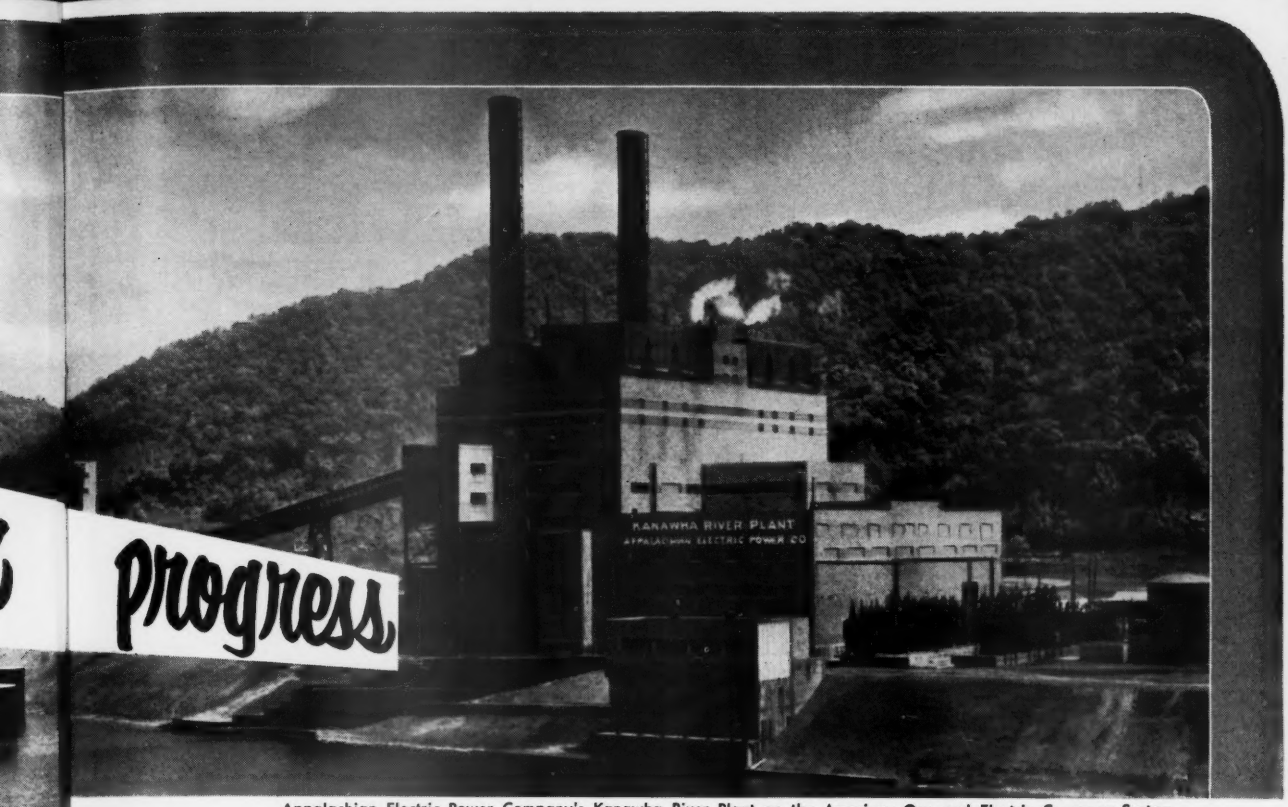
9594 PHILIP SPORN
Appalachian Electric Power Co. and The Ohio Power Co. on the American Gas and Electric System—
Four B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.

9630 ST. CLAIR
Detroit Edison Co.—
Four B&W Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.

9661 EASTLAKE
The Cleveland Electric Illuminating Co.

9815 ASTORIA
Consolidated Edison Co. of New York, Inc.—
Two B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.

* Federal Power Commission figures



Appalachian Electric Power Company's Kanawha River Plant on the American Gas and Electric Company System.

Headed by a record 9170 Btu per net kwhr, these ten plants were the most efficient central stations in the country during 1953, the most recent year for which complete heat rate data are available.

Reflecting the decision of the electric companies to utilize the most recent engineering advances, even during a time of critical capacity expansion, the outstanding performance of these modern plants is a tribute to the foresight of the whole industry. It affords one more indication that the prime interest of this unique team of electric companies and their major suppliers lies in producing still lower-cost kilowatts for a still greater America.

B&W Boilers in many of these stations are designed with such advances as Pressure-Firing, Cyclone Steam Separators, Gas Recirculation and Divided Furnace Construction — features which have contributed substantially toward the outstanding efficiency levels achieved. Also, all steam generating units are equipped with reheaters, a development of major importance in improving plant efficiency.

Pressure-Firing

Among the many advantages of this important engineering advance, as utilized, for example, by the Kanawha River units, is elimination of air infiltration to reduce stack loss and assure greater efficiency. Maintenance is reduced and the use of forced-draft fans alone means easier starting, smoother operation and simpler controls. These are the reasons why more than 100 Pressure-Fired B&W units are now in service or under construction.

Cyclone Steam Separators

Operating inside the steam drum, these simple, stationary devices require no power or maintenance and do not take up building room. The Cyclone Separators assure positive natural circulation at high pressure, and with the steam scrubbers, make it possible to send steam of highest purity to the turbine. Consequently, turbine efficiency is maintained and turbine outages reduced.

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With this B&W construction, building volume is held to a minimum. Both sides of the furnace division wall are used to absorb heat and thus make it possible to achieve the required furnace cooling surface without excessive increase in building volume.

* * * * * *

The record heat rates set by these leading generating stations are closely followed by those of many more plants across the country which are producing low-cost kilowatts at efficiency levels unattainable just a few years ago. And B&W is continuing to devote its energies and its long-accumulated experience to the development of boiler designs that will contribute to still higher levels of steam generating efficiency. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.

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G-696

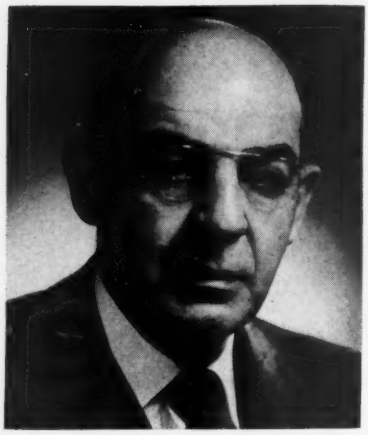
Pages with the Editors

IN the current international controversy between India and the tiny Portugese territorial holdings headed by Goa, we have seen in the newspapers frequent use made of the interesting word "enclave." According to the dictionary, this word, of French derivation, applies to any tract or territory held by one sovereign power which is entirely enclosed or surrounded by the territory of another sovereign power.

IN more recent correspondence with the author of the leading article in this issue concerning the establishment of a municipally owned and operated power plant by the city of Memphis, the same word was used. Our correspondent raised the question of whether Memphis is not creating an enclave with the territorial integrity of TVA's service area. Will this lead to further federal-state complications in the future? How will the respective duties and responsibilities of the two governmental agencies be worked out so as to avoid any undue burden or discrimination?

THESE are questions which the opening article in this issue undertakes to examine. Overlooked in the turmoil of the cancellation of the controversial Dixon-Yates contract for supplanting TVA power from a private utility source was the fact that such action was consistent with the President's repeated views on local responsibility for power supply.

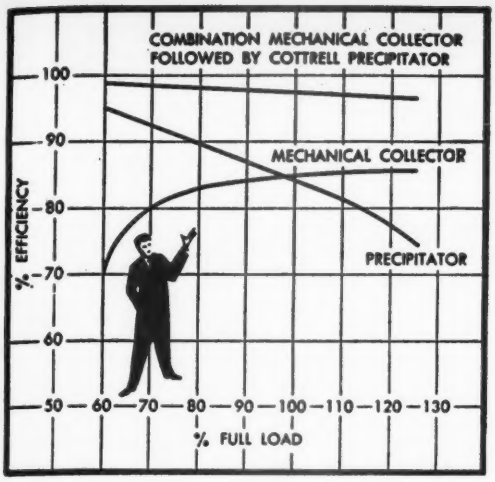
GEORGE A. DONDERO



F. L. (BUD) LARKIN

THE President has said repeatedly that he is in favor of "do it yourself" programs for cities such as Memphis which have been heretofore dependent entirely on the federal government for power supply. When Memphis showed that it could and would free dependence on TVA, a whole new approach to the problem posed by the growing demands on TVA power supply was opened up. CONGRESSMAN DONDERO has analyzed the situation in the light of valuable lessons to be learned from Dixon-Yates. He sketches five guiding principles to be followed in solving the problems of TVA's future.

CONGRESSMAN DONDERO was born in Greenfield township, Wayne county, Michigan, in 1883 and educated in the public schools at Royal Oak. He graduated from the Detroit College of Law (LLB, '10) and after some legal practice in Royal Oak he held various municipal offices, becoming the first mayor of Royal Oak when that former village became a full-fledged city in 1921. He was elected on the Republican ticket to be the Representa-



Advantages of the Western Precipitation CMP Unit

for recovering solids from stack gases in public utility operations

The control and recovery of fly ash from stack gases has always been a troublesome problem in public utility operations. With the development of the CMP unit by Western Precipitation Corporation, new economy and efficiency in the solution of fly ash problems are now possible.

Almost a half century ago Western Precipitation pioneered the first commercial application of the now-famous Cottrell Electrical Precipitator to recover suspensions *electrically*, and this equipment is still unsurpassed in its field.

Subsequently, to provide efficient fly ash recovery for low cost installations, Western Precipitation also pioneered the first small tube *mechanical* recovery unit — the Multiclone Collector — and this unit promptly gained widespread recognition for the new efficiencies it brought to mechanical recovery processes.

Combination Multiclone-Precipitator Unit. From these years of experience gained in both Cottrell and Multiclone installations, Western Precipitation recently offered another new development — the CMP Unit — a unit that combines in one compact installation many of the best features of both electrical and mechanical recovery methods.

In a typical CMP Unit, the stack gases first pass through a Multiclone section where the heavier materials are removed *mechanically*.

The partially-cleaned gases then pass through a Cottrell section where the very small particles are removed *electrically*.

This arrangement offers several advantages important to public utilities. Removing the heavier particles by the Multiclone process permits the bulk of the recovery operation to be performed with relatively low-cost equipment. Using a Cottrell for the final clean-up insures unusually high recovery efficiency — approaching theoretically perfect, if desired. Thus, the CMP combines high recovery efficiency with low total cost . . . and, as shown in the chart above, has the further advantage that the efficiency curve of the Multiclone portion complements that of the Cottrell portion — *therefore the overall CMP efficiency remains practically uniform at all boiler loads.*

At low boiler loads the recovery efficiency of the Cottrell is highest, while that of the Multiclone reaches its maximum at high boiler loads. But, by combining the two types of equipment into a *single* CMP unit, the efficiency curve remains almost flat whether the boiler load is low or high.

With CMP equipment, even small utility companies can now afford adequate fly ash recovery. However, it is important to remember that full benefit of the CMP principle can be obtained only by a proper balance between the mechanical and electrical sections to fit the individual requirements of *each individual* installation. And no organization is better equipped to provide this critical "know-how" than the organization that provides integrated responsibility for Cottrell, Multiclone and CMP methods . . . *the Western Precipitation Corporation.*

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tive of the eighteenth Michigan district to the 73rd Congress in 1934 and to every succeeding Congress, including the 84th. He is ranking minority member and former chairman of the House Committee on Public Works through which basic TVA legislation clears.

* * * *

MANY utility companies have had experience with various and sundry management development programs in an effort to grow adequate and prompt replacements for existing management. F. L. (BUD) LARKIN, vice president of the Wisconsin Electric Power Company (in his article beginning on page 386), has given us an interesting account of the results of research for a new set of tools to aid in the selection of people for management and to measure the human attributes on critical requirements. He discusses ratings, interviews, and tests—the three measuring devices—and the five objective measurements of personal attributes. These and other details of evaluating the management candidate on the job will be found to add up to both a thoughtful and rewarding article. Many readers will probably wish to retain this valuable analysis for periodical future reference.

MR. LARKIN is another Michigan native. He is a graduate of the University of Michigan (Industrial Engineering, '23) and joined the Milwaukee Electric Railway & Light Company (now the Wisconsin Electric Power Company) in 1925 as a junior engineer. With the unionization of that company's employees in 1934, MR. LARKIN assumed responsibility for organizing and co-ordinating union and employee relation functions. He was elected vice president of the company in 1944 and recently was made a director of the Wisconsin Michigan Power Company and Wisconsin Natural Gas Company.

BOOTH MOONEY

IN addition to responsibilities for industrial engineering, employee and union relations, training, accident prevention, and related activities, MR. LARKIN'S staff administers two activities for which the Wisconsin Electric Power Company has gained national recognition—a very comprehensive wage incentive system encompassing 115 different performance measurement plans and a highly developed program for selection and placement of employees at all levels. It is from this latter field of research and development that the article "Selecting Future Management" is drawn.

* * * *

THE very intimate contact of public utility operations with the daily lives of the entire population underscores the importance of continued and concentrated application of the best thoughts and techniques of sound and improved public relations. BOOTH MOONEY, public relations consultant of Texas, who is now a staff member of the Senate Democratic Policy Committee, has written (beginning on page 396) a stimulating discussion as to responsibility of public utility industries in keeping open two-way communication between management and the public in various problems so easily misunderstood or susceptible to misinterpretation. MR. MOONEY has been in journalism and public relations for some twenty years. Freelance writing has been his avocation for an even longer time. He is also at present executive assistant to the Senate Democratic Majority Leader, Lyndon B. Johnson (Texas).

THE next number of this magazine will be out September 29th.

The Editors

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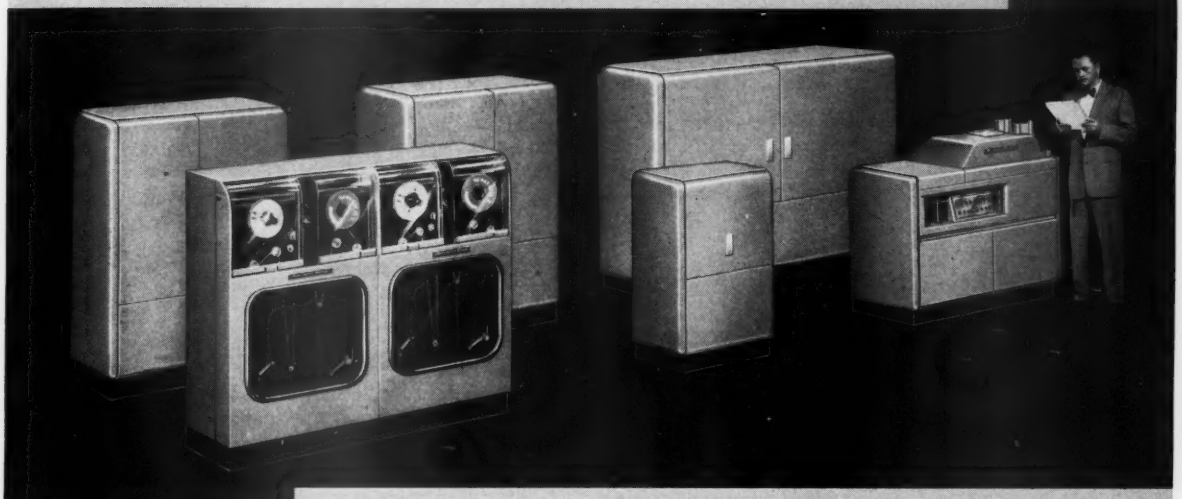

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TRANSIT ISN'T THAT "SICK"

Another twelve critical months have passed in the history of transit service operations in the United States. It has been a year of continued transition and dislocation, with economic, financial, competitive, and labor problems throwing a heavy burden on urban transportation companies that have the primary responsibility of moving the working masses of our great American cities. Donald C. Hyde, president of the American Transit Association, has written a comprehensive and thoughtful statement about economic and regulatory developments in the transit industry over the past year. Faced with a decline in patronage, the industry is left with no alternative but to impress upon the public the fact that passengers will eventually have to write their own ticket as to whether they want adequate service and are willing to pay for it.

TRANSIT HELPS TO SAVE DOWNTOWN BUSINESS

George W. Keith, professional writer of Cincinnati, has covered a rather novel but important angle of modern transit operations—the need for saving downtown business. This, of course, is everybody's job who has a stake in downtown business, including the learned professions—medicine, law, dentistry—with modern emphasis on specialization and downtown professional "center" buildings. There is the problem of the smaller specialty store without resources for moving into the fashionable suburban or satellite towns as the larger department stores have done with branch stores. What, in short, is the pattern of the future American city going to look like, and how is it to be served with mass transportation in both the mother city and the growing suburban community? These are the problems which Mr. Keith considers in his article.

ECONOMICS OF THE TRANSIT OPERATING RATIO

There has been a noticeable trend toward an operating ratio as a basis for fixing fares for transit companies. A relatively small rate base investment (as compared with gas, electric, and telephone utilities) in relation to the heavy volume of expenses, payrolls, vehicle maintenance, and supplies, etc., has made it difficult for transit companies to attract investment capital on the conventional return-on-rate-base formula. Charles W. Knapp, an accounting consultant of West Hartford, Connecticut, has made a study of the ways and means whereby regulatory authorities can liberalize operating ratio techniques which will encourage and assist transit operations, while at the same time fulfilling their responsibility as regulators in the public interest.

A PATTERN OF CO-ORDINATION, TRANSIT—TRAFFIC

Most transit people will agree that the main problem of retaining profitable operations in the average city is to limit the double-barreled competition of private automobile passenger transportation and of indiscriminate downtown parking of these automobiles so that they interfere with streetcar and bus schedules. But like the proverbial problem of "belling the cat," it is a nice trick if you can do it. The average transit management is powerless to do it and the average municipal politician wants no part of such an unpopular task. But some steps can be made in a modest and orderly way to put pressure on drivers of private cars so as to prevent them from leaving them downtown. Gerald J. Glassman, economist with the transportation and public utilities branch of OPA during World War II, and more recently consultant with the public utilities division of the Treasury Department, has tackled this knotty problem in an article which is well worthy of consideration even though it might also provoke dissent in some quarters.

★

Also . . . *Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.*

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The Wall Street Journal.

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President, New Jersey Taxpayers Association.

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President, Campbell Soup Company.

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ALEXANDER R. HERON
Vice president, Crown-Zellerbach Corporation.

"[Industry] has not nearly finished training its people for the new climate created by the evolution of labor relations in the last twenty years. With that job unfinished, it must now race to train its people for the new problems—ranging from pensions to atomic energy, from health insurance to electronics, from guaranteed annual wages to automation."

HENRY FORD II
President, Ford Motor Company.

"We ask those who seek to shackle free and open competition to reflect on the consequences. The short-range effect might be to afford a measure of protection for those in a weaker competitive position. The long-range effect could only be to put a damper on America's constantly rising standard of living by penalizing the most important man in our economic system — the consumer."

HAROLD BRAYMAN
Director, public relations department, E. I. du Pont de Nemours & Company, Inc.

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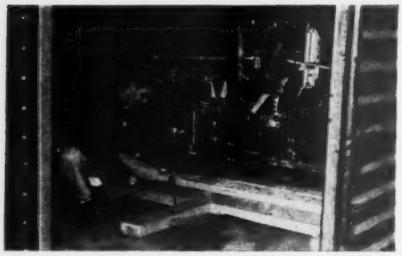

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The only COMPLETE radio communications service—specialized engineering . . . product . . . customer service . . . parts . . . installation . . . maintenance . . . finance . . . lease.
"The best costs you less—specify Motorola."

Mr. Thompson with one of their "new-looking" 20-year poles.

Pressure-Creosoted poles installed in 1916 still in service!

• The length of service received from any type of equipment is usually the truest test of its value and real cost. This is certainly the case with pressure-creosoted utility poles. Take the record of the Iowa-Illinois Gas & Electric Co., of Davenport, Iowa.

This utility, which serves 100,000 residential and commercial customers in both urban and rural areas, has been using pressure-creosoted poles for a long time. "Creosote-treated poles last even longer than we had expected when we originally purchased them. We've been using them since 1916 and still do not know when a creosoted pole can be called old," says Mr. William Thompson, construction supervisor. "Many of our oldest poles have been removed from their original locations. In at least one case that I can recall, poles installed in 1923 were pulled out of a 25-mile stretch in 1944, found to be in excellent shape and reinstalled in rural areas in 1945."

Mr. E. F. Miller, manager of Iowa-Illinois Electric Transmission and Distribution Division, adds, "In 1945 and 1946, we pulled out about 300 creosoted poles that were over 30 years old. Only 3 poles had to be junked . . . the rest were put back into service in various rural lines."

A good record? Certainly, but not unusual when you use utility poles pressure-treated with a good grade of creosote—like USS Creosote. For more information on this quality wood preservative, contact our nearest sales office or write to United States Steel Corporation, 525 William Penn Place, Pittsburgh, Pa.

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SALES OFFICES IN PITTSBURGH, NEW YORK, CHICAGO, CLEVELAND, SAN FRANCISCO AND FAIRFIELD, ALA.

UNITED STATES STEEL

300,000-Kw Steam Turbine Generator

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The illustration below shows a model of a 300,000-kw steam turbine generating unit being built by Allis-Chalmers for Detroit Edison. Its capacity is far higher than that of any steam turbine generating unit yet built. It is capable of supplying the needs of a city of half a million people.

When this new unit goes into operation, the total capacity of the Detroit Edison system will be more than 3¼ million kilowatts — double the system's capacity of ten years ago.

Many features of this unit are examples of Allis-Chalmers developments that help utilities keep pace with our expanding economy. The unit is close-coupled, cross-compound reheat design, with two generators, one on the 3600-rpm shaft, one on the 1800-rpm shaft. The 3600-rpm generator is fully supercharged, taking advantage of an

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Allis-Chalmers development that makes possible higher capacities and smaller relative sizes.

The fully supercharged 3600-rpm generator is rated 206,470 kva, 0.85 power factor, 0.80 short circuit ratio, at rated hydrogen pressure. The 1800-rpm generator is a conventional hydrogen-cooled machine that is rated 171,765 kva, 0.85 power factor, 0.80 short circuit ratio, at rated hydrogen pressure. Operating steam conditions are 2400 psig, 1050 F at inlet; 1000 F reheat; and 1 inch Hg absolute exhaust pressure.

* * *

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UTILITIES *A·l·m·a·n·a·c·k*

SEPTEMBER

Thursday—15 *Public Utilities Association of the Virginias begins annual meeting, White Sulphur Springs, W. Va.*	**Friday—16** *Maryland Utilities Association begins fall conference, Virginia Beach, Va.*	**Saturday—17** *American Institute of Electrical Engineers will hold fall general meeting, Chicago, Ill. Oct. 3-7.* ***Advance notice.***	**Sunday—18** *New England Water Works Association begins meeting, Lake Placid, N. Y.*
Monday—19 *Society of Industrial Packaging and Materials Engineers begins tenth anniversary meeting, New York, N. Y.*	**Tuesday—20** *Pennsylvania Electric Association begins annual meeting, Philadelphia, Pa.*	**Wednesday—21** *National Industrial Conference Board begins marketing meeting, New York, N. Y.*	**Thursday—22** *United States Independent Telephone Association will hold annual convention, Chicago, Ill. Oct. 10-12.* ***Advance notice.***
Friday—23 *Oklahoma Utilities Association, Gas Division, begins meeting, Oklahoma City, Okla.*	**Saturday—24** *Gas Appliance Manufacturers Association will hold annual meeting, Palm Springs, Cal. Oct. 12-14.* ***Advance notice.***	**Sunday—25** *International Gas Union begins conference, New York, N. Y.*	**Monday—26** *American Transit Association begins annual meeting, Boston, Mass.*
Tuesday—27 *Arkansas Telephone Association ends 2-day annual convention, Hot Springs, Ark.*	**Wednesday—28** *National Association of Electrical Distributors ends 4-day Pacific zone annual convention, Victoria, British Columbia, Canada.*	**Thursday—29** *Standards Engineers Society begins annual meeting, Hartford, Conn.*	**Friday—30** *Atomic Industrial Forum, Inc., ends first 5-day trade fair, Washington, D. C.*

Courtesy, Lincoln Telephone & Telegraph Company

"Service in the Harvest Fields"

Public Utilities
FORTNIGHTLY

VOL. 56, NO. 6 SEPTEMBER 15, 1955

Memphis Home Rule Plan— A New TVA Pattern?

Overlooked in the turmoil of the cancellation of the controversial Dixon-Yates contract for supplanting TVA power from a private utility source was the fact that such action was entirely consistent with the President's repeated views on local responsibility for power supply. This author sketches five guiding principles to be followed in solving the problem of TVA's future.

BY THE HONORABLE GEORGE A. DONDERO*
U. S. REPRESENTATIVE FROM MICHIGAN

THE dramatic cancellation of the Dixon-Yates contract may mark the start toward development of a realistically healthy new approach to the problem of financing electrical generating and transmission capacity in the area served by the Tennessee Valley Authority. If so, all the tremendous efforts by private utility companies and government officials, not to mention the extensive debates in Congress, will have been well worth while.

Ironically enough, the new approach to the TVA area problem was made possible by the chief opponents of the Dixon-Yates contract, the public ownership protagonists now in control of the government of the city of Memphis. It was their announcement that Memphis by its own financing would itself construct, own, and operate a 600,000-kilowatt steam plant as

*For additional personal note, see "Pages with the Editors."

an alternative to accepting private power, that made the contract cancellation possible, and indeed inevitable.

It was fortunate that the Memphis contract with TVA terminates in 1958, thus allowing the city ample time to finance and construct its own generating capacity. This is particularly true since the city would have had no choice but to have accepted Dixon-Yates power through the TVA system had its contract extended to a later date.

THIS is due to the "sole supplier" and resale control clauses contained in the Memphis contract, as with all other contracts with preferred customers of TVA. Under these provisions Memphis was contractually bound to obtain additional power supplies from no other source but TVA, even from plants built and owned by the city. In the past, when municipal systems have contracted to purchase power from TVA, they have, by the agreement, either transferred ownership of their generating capacity to TVA or otherwise disposed of such facilities.

Even had Memphis been free of the "sole supplier" clause, it would have been impossible for the city fathers to have financed construction of their own plant due to restrictions on disposition of their electric revenues from power obtained from TVA under the provisions of its contracts. TVA's resale rate control is so restrictive as to preclude the pledging of electric sales revenues for any purpose.

Since the same "sole supplier" and resale rate provisions—the so-called captive clauses—obtain throughout the TVA system, the Memphis pattern can be followed by other preferred customers only if and when their existing contracts expire and if TVA no longer insists on inclusion of these provisions—unless abrogated by legislative or executive action.

IT is apparent that unless TVA is able to guarantee adequate power for the growing demand in the area, it will not be in a position to insist upon such limitations. In the immediate future certain important contracts of this type will expire —allowing sufficient time for negotiation of new contracts eliminating such clauses and providing for locally financed sources of power either by purchase from nonfederal sources or by construction of additional facilities.

More than two years ago I introduced a bill which would nullify these two monopolistic contract provisions and a similar bill is now pending in the Congress. Enactment would immediately put all of TVA's preference customers on notice that Uncle Sam's barrel is not bottomless and that proper foresight should be exercised to anticipate future needs beyond existing capacity of TVA. The bill does not contemplate, however, the severance of customer relations but permits customers to acquire secondary sources of power which eventually might become primary sources, operated wholly independently from TVA from a financial standpoint but necessarily interconnected for efficient co-operation. It is not contemplated that there would be any sudden impact upon the power supply situation in the area. Indeed, the transitional period would be softened considerably by means which I shall here point out.

However, even without cancellation by Congress of TVA's monopoly clauses, a gradual transition would be inevitable in any case over the next twenty years if

Congress continues to disapprove any new starts for additional generating capacity. It happens that in the late thirties most of TVA contracts were initiated on a 20-year basis. Except for those which have since been extended by ten years, these contracts will be expiring in 1958, '59, '60, and '61. It is now apparent that TVA vastly overcontracted its capacity when it executed these contracts twenty years ago. Its customers will be unlikely to endanger their future by commitments to new "sole supplier" contracts.

MEANWHILE, the time lapse between present demand and ultimate limit of TVA capacity can be extended for a number of years without new general legislation by two simple immediate steps on the part of the TVA. These are:

FIRST, notice to industrial customers of sharp cutbacks under five-year cancellation clauses in all such contracts; and,

SECOND, submission to the Bureau of the Budget of request for appropriation to *complete* the planned capacity of *already existing* generating facilities.

It has been brought out in recent Senate hearings that approximately 20 per cent of TVA's total demand arises from the requirements of some fourteen large industrial customers dealing directly with TVA. Under the TVA Act industrial customers have a priority secondary to the position of preferred customers, which are municipalities and co-operatives. Mindful of its legal duty TVA included in its long-term industrial contracts cancellation clauses permitting partial or total cancellation within a period of five years, a period estimated to accommodate TVA's future planning and to afford the industrial customer sufficient time to construct his own added generating facilities. The same hearings show that the crucial load of the politically and economically important preferred customers will be about 30 per cent. Thus there is an enormous capacity in reserve for TVA to call upon in following the preference law.

IT is worth while here to recall the testimony of David Lilienthal, then chairman of the TVA, and of Julius Krug, then power manager of TVA, on April 13, 1939, before a Senate committee. Explaining certain major contracts for the sale of large blocks of power to industrial and private utility customers, Mr. Lilienthal said:

> Yet it is a part of our job to dispose of all of this power not twenty or thirty years from now, but as soon as possible,

¶ *"THE dramatic cancellation of the Dixon-Yates contract may mark the start toward development of a realistically healthy new approach to the problem of financing electrical generating and transmission capacity in the area served by the Tennessee Valley Authority. . . . Ironically enough, the new approach to the TVA area problem was made possible by the chief opponents of the Dixon-Yates contract, the public ownership protagonists now in control . . . of the city of Memphis."*

and, so far as possible, every year during the life of the plants. That means that some method must be found of disposing of power for relatively short periods pending the growth of load by our municipal and co-operative customers. The only solution is sale to industrial and utility customers, that we have been able to devise. . . . We have been successful in so staggering our contracts that I believe we have in large part solved the problem of reserving power for the growth of our municipal and co-operative customers without presently wasting the power so reserved.

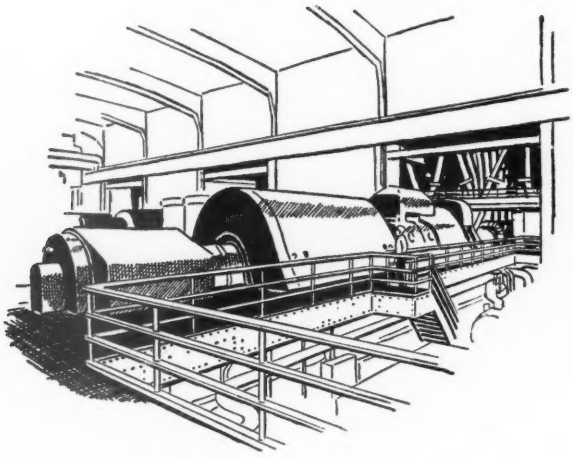
It is obvious that had the industrial contract program laid down in 1939 by David Lilienthal been followed through the years, the municipal and co-operative customers would not now be facing an immediate crisis.

GENERAL Vogel, chairman of the TVA, recently testified that the near-future power crisis could be averted for the present by the addition of four new units at the New Johnsonville steam plant and one new unit each at the John Sevier and Gallatin steam plants. Be it remembered here that Congress at no time has ever refused TVA funds for the *completion* of plants previously authorized. All three of the above plants are now in a state of partial completion. It is obvious that from a maintenance standpoint alone their overall efficiency and economy of operation would be increased by the inclusion of the total number of units for which the engineers planned.

Congressional objection to TVA's power expansion has been confined and will always be confined to the burgeoning program of new starts all over the system map. Congress has demonstrated for three years running that it wants no part of any more new starts for TVA generation. Somehow this distinction has been lost in the shuffle of TVA debate. Also lost in the same shuffle is the time-honored precedent that Congress almost never leaves unfinished those projects it has authorized and for which it has appropriated funds, even in the face of higher costs and changed designs.

I am fully confident that the 1,000,000 kilowatts of additional capacity required, according to General Vogel, costing $144,000,000, will be made available by the conventional appropriations route. Certainly I see no objection at this time to such an appropriation. This would bring TVA's maximum total capacity, according to General Vogel, to 11,335,000 kilowatts at the end of 1958, as against an anticipated load at that time of 10,100,000 kilowatts. If these new units are not ordered, the General asserts, TVA will have a dependable total capacity of only 10,342,000 kilowatts. As he himself said, the difference "would provide a fair and rather comfortable margin."

WITH a million kilowatts of reserve capacity at hand in 1958 the TVA should be able to recapture at least another million kilowatts of capacity by withdrawing only half of its industrial output by notices sent out in 1955 and effective in 1960. This action would be accomplished without a penny's loss to the taxpayers and indeed to the great benefit at least to local taxpayers. Industrial customers would then have five years in which to arrange new power supplies without cost to the federal government.



There Will Always Be a TVA

"A PROGRAM envisaging a halt to TVA's own power expansion in generation and transmission does not involve the often voiced fear of 'destruction of TVA.' As steam plants grow obsolete over the next twenty or thirty years and are retired, they would not be replaced except by locally owned facilities, perhaps interconnected by TVA's transmission system, which, of course, would remain in existence to interconnect its far-reaching system of hydroelectric dams. Transition would take place gradually over a long period of time and would be so gentle as to be scarcely noted from year to year. However, there would always be a TVA."

With this breathing space the individual distribution systems, municipal and cooperative, would have ample time to make their own arrangements for such additional power supplies as would be needed.

In the meantime, too, it is entirely conceivable, as the Comptroller General recently pointed out, that TVA's load to AEC and other government agencies, now or presently at a perilous par with all of TVA's other power commitments combined, will have sharply shrunk. Indeed it may well be anticipated that long before the expiration of its 25-year contracts, the AEC will be supplying itself with its own power generated by fission or fusion heated steam.

THE statement of the Comptroller General, Joseph Campbell, dated July 26, 1955, and addressed to the Public Works Committee of the Senate, in reference to a pending bill to provide for construction expansion by TVA through revenue

bonds, points up very seriously this factor of the imbalance of the TVA system in relation to the federal government power demands:

> Since the purpose of the proposed bill is to provide for an expansion of the TVA system, we suggest the importance of obtaining a careful analysis of the power requirements of the several government agencies presently dependent upon the system. Your attention is invited to various published statements to the effect that national defense agencies of the government will absorb half the total output of the system by 1957. Should these demands sharply decrease, the effect on the TVA power operation could be most serious, if not disastrous, to the power rate structure as well as to the general economy of the area. We have particularly in mind the operations of the Atomic Energy Commission.
>
> This great dependence of the system on a continued enormous government power demand leads to the suggestion that, in any expansion program, the affairs of the TVA should require unusually close control by the Congress and the executive branch of the government. Therefore, the proposed bill, which, in essence, would grant unlimited authority to the TVA, seems highly inappropriate.

From the selfish interests both of the customers themselves and of the federal government, the long-range wisdom of increasing emphasis on local independence for power supply is evident.

THE trail-breaking action of the city of Memphis in its announced intention of cutting loose from TVA's "sole supplier" and revenue control monopoly clauses when it constructs its own steam plant for use beginning in 1958 is wholly in step with the partnership proposals of President Eisenhower.

Basically, the partnership policy is simply this: The federal government shall not extend its sphere of influence into areas of activities which local agencies, public or private, are ready, willing, and able to undertake.

The letter of the President on November 10, 1954, to Representative Sterling Cole of New York, comes to mind as particularly pat:

> If the federal government assumes responsibility in perpetuity for providing the *TVA area* with all of the power it can accept, generated by any means whatsoever, it has a similar responsibility with respect to *every other area and region* and corner of the United States of America.

Here our President spelled out the fact that if TVA, an agency of the federal government, is permitted to assume public utility responsibility for the TVA area, then the federal government must expect to accept the same responsibility elsewhere throughout the country. That way lies nationalization of the electric utility industry! TVA will have accomplished its mission for the promotion of Socialism in America.

IN the case of Memphis, it was obvious that private enterprise would be excluded inasmuch as the city already owns an extensive distribution system into which a generating plant could logically be fitted.

MEMPHIS HOME RULE PLAN—A NEW TVA PATTERN?

On March 16th of this year the President, according to *The New York Times,* said he "knew of no reason" why the city of Memphis should not build its own power plant and that he would favor its construction. At the same time he permitted direct quotation as follows:

> I have nothing at all against local ownership of power. I think in many cases it is not only a good thing; in some cases it has proved to be very effective. (It is presumed he is speaking here of municipal ownership.)

And again, on July 6th, the President commented further on the Memphis situation in relation to the "sole supplier" clause following the announcement of the city's plan to build its own plant.

Paraphrasing directly from the transcript of the press conference held on that day:

> The President recalled that a group of Memphis citizens and other TVA supporters had first called upon him to urge insistently the construction of a new steam plant with federal funds. The delegation stated that this was the only way they could get a plant and that the city of Memphis would be without sufficient power unless such a plant would be built.
>
> The President's callers then showed him that it would be impossible for Memphis to build its own plant because of the type of contract that TVA had made with all of its customers. It was an exclusive sort of contract. If you take any power from TVA, *then you may not, under your contract, get any power anywhere else.* (Emphasis supplied.)
>
> Thus it was, the President explained, that the Dixon-Yates contract provided a solution at that moment.
>
> He expressed himself, however, as delighted that the city of Memphis, or any other local community, when it comes to the simple building of a power station with no flood control, navigation, or other factors in it, should do it themselves. The President said that doing it themselves was in accordance with the philosophy in which he believes.

Apparently it later developed that the captive contract under which Memphis was denied power from any other source will expire in 1958 and that Memphis now intends to exercise its right to be free.

An alternative solution to meet the problem of the expanding needs of the area presently served by TVA has been

¶ "Legislation *relating to TVA should be confined to operations peculiar to that agency. For that reason I do not suggest that any TVA legislation should meet all the various requirements of sound business operations which should be applicable to the entire federal power program. Such basic legislation, affecting all federal power projects, is badly needed so that the 80 per cent of our population who do not enjoy but pay for the subsidy of the remaining 20 per cent should be relieved of this burden.*"

proposed by the staff of TVA and dividedly sponsored by its board. I refer to the pending bills introduced in support of the staff proposal submitted to Congress on April 4, 1955, by the TVA board, suggesting legislation under which TVA's future construction expansion be financed by three methods: (a) continuation of congressional appropriations; (b) issuance of revenue bonds; (c) by legislation permitting acquisition of additional facilities by lease-purchase contracts with nonfederal agencies to be designed, constructed, and operated by TVA personnel or under TVA supervision, generally looking to eventual physical ownership by TVA.

THIS proposal should be looked upon in the frame of reference of the period during which it was drafted.

When the present administration was inaugurated and the tentative and necessarily rudimentary outlines of the partnership policy were being developed, the TVA was clamoring for a new start in its steam-generating program. It demanded an enormous steam plant to be located at Fulton, Tennessee (outside the watershed of the Tennessee river), to take care of the requirements of the western end of the TVA system which would soon be under additional demands from the AEC at Paducah. The problem was urgently immediate, and it was as a solution to that pressing problem that the Dixon-Yates proposal evolved, the power to be supplied to the TVA by a private utility and, by exchange, delivered to AEC. It was never considered as a permanent solution, as is indicated in the President's letter to Representative Cole last November. It was in this period that the TVA staff was asked to formulate a plan.

HAVING studied the TVA proposal, I have come to the conclusion that this "remedy" is far worse than the malady. Moreover, the modifications proposed by the Bureau of the Budget, while vastly improving the staff scheme, still perpetuate and expand some of the basic faults in the TVA Act as it has been administered over the past two decades.

It is worthy of note here that the present impending power shortage impasse results from the authority's own administration of the organic act.

At the request of the board, Congress in 1935 amended the 1933 act and included provisions under which it could contract for the sale of power to preference customers under its own "terms and conditions." The same paragraph authorized TVA to regulate resale rates of the customers—a sweeping invasion of local self-government which is unique to the TVA among all federal power agencies.

The board then executed contracts that not only included the "sole supplier" clause but also, under its resale control clause, provided for the disposition of revenues so as to preclude use of such funds for financing other municipal operations including additional electrical generating facilities.

Thus TVA, by administrative action, assumed the total wholesale function and, unique among utility systems the country over, it became an *unregulated monopoly*.

Next the TVA included in 20-year contracts commitments for the future sale of enormous blocks of power well beyond its foreseeable capacity from hydroelectric sources. As S. R. Finley, general superintendent of the Chattanooga Power Board, frankly admitted in his testimony before the Senate subcommittee on these

The Transition to Local Responsibility

". . . even without cancellation by Congress of TVA's monopoly clauses, a gradual transition would be inevitable in any case over the next twenty years if Congress continues to disapprove any new starts for additional generating capacity. It happens that in the late thirties most of TVA contracts were initiated on a 20-year basis. Except for those which have since been extended by ten years, these contracts will be expiring in 1958, '59, '60, and '61. It is now apparent that TVA vastly overcontracted its capacity when it executed these contracts twenty years ago. Its customers will be unlikely to endanger their future by commitments to new 'sole supplier' contracts."

bills, the "sole supplier" clause necessitated the TVA steam-generating business, an activity never contemplated by Congress.

Now the problem is to attempt to bring to a halt policies that never should have been undertaken in the first place and to redirect the program more nearly within the framework of the American free enterprise system.

Approached from this standpoint, my objections to the pending revenue bond-lease purchase proposals may be summarized simply as follows:

1. The whole scheme should have been declared a dead issue on July 11th, the day the Dixon-Yates contract was canceled, in favor of the city of Memphis.

When Memphis showed that it could and would free itself from the shackles of TVA, a whole new approach to the solution of the TVA problem was opened.

No valid reason can be presented as to why the major municipalities now served by TVA cannot economically supplement TVA's power capacity by plants of their own. Chattanooga, for example, according to Mr. Finley's testimony, serves an area of 500 square miles, has 5,000 customers across the river in the state of Georgia, and, with a $20,000,000 distribution system is TVA's largest preferred customer. It is in splendid financial position to take care of its own needs before the expiration date of its contract in January, 1969, provided it be given due notice—say three years—of cancellation of TVA's "sole supplier" and revenue control provisions.

A program envisaging a halt to TVA's own power expansion in generation and transmission does not involve the often voiced fear of "destruction of TVA." As steam plants grow obsolete over the next twenty or thirty years and are retired, they would not be replaced except by locally owned facilities, perhaps interconnected by TVA's transmission system, which, of course, would remain in existence to interconnect its far-reaching system of hydroelectric dams. Transition would take place gradually over a long period of time and would be so gentle as to be scarcely noted from year to year.

However, there would always be a TVA. It would be an agency dedicated to the idealistic principles of its founders, for the development of flood control, navigation improvement, and incidental electric power. For many years TVA would continue to be the largest single integrated utility system in the nation.

2. THESE bills would give congressional sanction to TVA as an unregulated federal public utility monopoly. Such an action would be a congressional corporate charter to Socialism.

True, TVA's rôle has been exactly that over the past fifteen years or more. But this position through the war years and since has been maintained on sufferance only as a result of administrative action extending far beyond the intent of Congress. Had the present situation been spelled out to Congress in 1933 or in 1935 —the dates of enactment and of first amendment—I say with confidence that congressional approval would have been denied.

The support of this proposal by the American Public Power Association is candidly based on the thesis that the bills would open the door to further subsidized federal power expansion. W. E. Hooper, president of that association, in testifying to the Senate subcommittee, said his organization supports the legislation because "the pattern of financing evolved from this legislation may well be cited as a precedent for federal power systems in other parts of the country which supply power to our members."

The safeguarding provisions insisted upon by the Bureau of the Budget may make the latter's bill somewhat more palatable than the bold grab for power envisaged in the TVA staff version, but only by comparison is it a better bill. Both of them not only are obsolete but both would give congressional sanction to the monopoly function of TVA. If TVA, with its vast subsidies can enjoy such privileges, it is obvious that the spread of Socialism will be rapid in the electric power field within an early period.

This is particularly true because of the rôle of the federal government in the development of atomic energy.

3. Both proposals contain a somewhat disguised but nevertheless implicit authority for the spread of TVA's service area to a size quadruple its present confines.

Interpretation of our laws is guided to an important and sometimes controlling extent by what is termed "the intent of Congress." In the recent hearings it was fully developed that the legal limit under existing law—and this would be interpreted as if it were part of the bill—is the physically feasible distance of electric transmission from any TVA dam.

This theory was propounded by General Counsel Joseph Swidler in an official opinion to the board, May 5, 1948. As witnesses then pointed out, the TVA system at that time had a maximum transmission capacity of 154,000 kilowatts and a maximum transmission distance of 175 miles.

Since then, expert witnesses have testified that private utilities now have transmission systems with a voltage as heavy as 330,000 kilowatts, or more than double the 1948 TVA capacity. The radius of such transmission lines would encompass an area which would overlap the major power systems of virtually all of the state of Illinois, including Chicago; and Indiana, including Indianapolis. Cincinnati and Columbus, Ohio, and the industrial complex of Cleveland, Canton, Youngstown, and Wheeling would fall within TVA's periphery. All of West Virginia, the western half of Virginia, as well as the city of Washington, and virtually all of North and South Carolina would be included. The industrial centers of Georgia and Alabama, including Atlanta, Montgomery, and Birmingham, as well as the city of St. Louis in Missouri, would be on the list.

According to Mr. Swidler, there are only three requirements that must be met to assure expansion to the limits of this periphery: (1) expressed local desire for participation in TVA's federally endowed subsidy rates—a very powerful inducement indeed; (2) the decision of the board of the TVA; and (3) finances to supply the necessary generating and transmission facilities. With the passage of either of these bills it may be anticipated that, over the years, the geographic meaning of the Tennessee valley in connection with this authority will be lost as it extends into the Ohio and Missouri and Mississippi as well as the eastern seaboard valleys. Then the dynamic free enterprise

¶ "Congressional *objection to TVA's power expansion has been confined . . . to the burgeoning program of new starts all over the system map. Congress has demonstrated for three years running that it wants no part of any more new starts for TVA generation. Somehow this distinction has been lost in the shuffle of TVA debate. Also lost in the same shuffle is the time-honored precedent that Congress almost never leaves unfinished those projects it has authorized and for which it has appropriated funds, even in the face of higher costs and changed designs.*"

electric utility system of our country as we now know it may be expected gradually to disappear.

Congress should immediately define the boundaries of TVA within its present service area.

4. My objections to the issuance of revenue bonds by the federal government for special purposes are not rigid.

In fact, the Hoover Commission recommendations in this respect are generally acceptable if irrevocably tied to the other conditions set out by this great report: elimination of any construction of new steam plants, full payment of interest and principal on the federal investment, an adjustment of rates to accommodate full federal and state tax obligations similar to those charged to private enterprise, and delimitation of service area.

The critical factor relates to the function to which such revenue bonds would be put. For example, I strongly support issuance of revenue bonds for the function of providing the national defense and all of the people with vitally needed adequate national highway interconnection. I cannot, however, subscribe to the use of the federal credit—and the sponsors of this bill admit that the federal credit is deeply involved—for a selected group of special interest citizens for their special benefit at the expense of the balance of the nation's taxpayers—except, of course, in cases of disaster, extreme area-wide pauperism as in rural slums, etc., none of which applies to the burgeoning economy of the Tennessee valley area.

Nor can I find myself in ironclad opposition to the federal lease-purchase or output-purchase proposals as such. In common practice the federal government rents or leases many forms of property. In some cases the government enters into long-term leases at the termination of which the property is turned over to the government either as a condition of the lease or for a nominal sum. These are standard business practices. However, as G. O. Wessenauer, manager of power at TVA, stated in support of the lease-purchase bill, TVA actually would be using the revenues and the credit of the federal government to acquire generating facilities for which the Congress refuses to appropriate funds. Those revenues and that credit belong to the United States government and are not under the private domain of the board of TVA.

Under the plan as proposed by this bill even a dummy nonprofit corporation having no assets of its own could be set up for issuance of tax-exempt revenue bonds which would be readily salable on the basis of a long-term lease-purchase contract with the TVA. These facilities would be in the possession of the dummy corporation in name only. It would be designed and operated wholly by and within the control of the operators of the TVA system.

These factors have been candidly spelled out. Counsel Swidler, explaining a provision in the proposed bill under which the TVA would undertake the engineering and design of lease-purchase plants, said "before you entered into an agreement *to pick up the check*—you would want to be sure that the plant met your standards . . ." (Emphasis supplied.) In the same hearing on July 27th, Mr. Wessenauer frankly admitted that the lease-purchase plan could be fallen back

upon should the $750,000,000 bond issue limit become exhausted.

THUS between the revenue bonds and the lease-purchase plan the TVA would have virtually inexhaustible resources to finance its physical and geographic expansion. Moreover, under either proposal, the federal taxpayer becomes a second-class citizen in relation to the privileged customer of TVA. Revenue bonds would be salable at a much lower rate because they would be given preference as to revenues over returns to the federal government, and the holders of the tax-exempt revenue bonds issued on the strength of TVA lease-purchase contracts would enjoy an even higher priority than the revenue bondholder. This inferior position arises because funds to meet the lease-purchase obligations must come out of operating expenses which must be met even before any revenues would be available for TVA's bondholders.

The billion dollars of federally invested money—$800,000,000 through appropriations and $200,000,000 from earnings which otherwise would have gone to the Treasury—are considered in this deal as an equity cushion to protect bondholders, whereas private utility bondholders receive far lower returns on their investments as the price of security. The TVA proposal would pay the revenue bondholders an even higher rate than is proposed to be put into the federal treasury for the use of its "common stock" investment.

5. IN conclusion, there are many other serious but lesser objections to this plan which might be raised if the considerations just outlined were not in my opinion controlling.

Legislation relating to TVA should be confined to operations peculiar to that agency. For that reason I do not suggest that any TVA legislation should meet all the various requirements of sound business operations which should be applicable to the entire federal power program. Such basic legislation, affecting all federal power projects, is badly needed so that the 80 per cent of our population who do not enjoy but pay for the subsidy of the remaining 20 per cent should be relieved of this burden.

"THE task force which the [Hoover] commission delegated to examine paper work within the government found that the annual cost ran to $4 billion, and that is a lot of paper.

"As a matter of fact, it is safe to assume that it is too much paper. It is a human reaction for governmental agencies—as well as some people—to produce something as an added justification for appropriations and salaries. Quite often this takes the form of a tremendous outpouring of paper work on the thesis that the greater and thicker the variety of reports, the more importance is attached to the individual agency or person."

—EDITORIAL STATEMENT,
Los Angeles Times.

Selecting Future Management

Many utility companies have had experience with various and sundry management development programs in an effort to produce adequate and prompt replacements for existing management. This article gives us an interesting account of the results of research for a new set of tools to aid in the selection of people for management and to measure the human attributes on critical requirements.

By F. L. (BUD) LARKIN*
VICE PRESIDENT, WISCONSIN ELECTRIC POWER COMPANY

ASSUMING that utilities, along with other American industries, are going to be permitted to have a future, the selection of people for management will, of course, be accomplished. Accordingly, there is no punch in the above title. Utility executives are approving the selection of people for supervisory and administrative positions almost every day.

But, wait—are those responsible executives, while shaping the future of their companies, still approving the selection of people for management by the same methods used a generation ago, or have they applied to that very important process some small fraction of the scientific approach lavished upon practically every other phase of utility operation? Chances are, they have not.

Why do utilities employ droves of skilled, technical specialists to design and create equipment and operating techniques to get the utmost efficiency out of mechanical equipment permitted by up-to-date scientific know-how and then fail to use simple, valid, scientific procedures to improve the selection of the most important thing they buy—management from foreman to president? Why are such factors as length of service, technical ability, loyalty, college degrees, etc., etc., still dominant as selection criteria when there is a vacancy in supervision to be filled? Why are we still putting square pegs in round holes? Why are we still guessing about an individual's capacity for management?

I AM definitely not inferring that utilities have inferior supervisory organizations. In that respect the industry is as good as any and better than some. However, in a typical company, utility or otherwise, I believe that top management will freely

*For additional personal note, see "Pages with the Editors."

admit that some individuals did not work out as anticipated; that in supervisory and administrative positions individuals range from fair to excellent, and that average could be jacked up a few notches if a larger proportion of persons selected for management in the future turned out to be as good as had been expected.

We know that the stresses and strains of industrial management have constantly increased during our own tenure of office. When we consider that those who carry on in the future will have to function in a world where every problem will be bigger —bigger labor, bigger government, bigger construction projects, bigger operating and financial problems, bigger successes and bigger failures—we cannot afford to make mistakes—future management had better be good. We, today's management, hold the future in our hands and by applying a little scientific know-how where it is now sadly lacking, we can be more certain that future management will be good—very good.

At least, that is the way we saw the picture at Wisconsin Electric Power Company back in 1947 when we began our venture to translate into the complex field of human capacities, personalities, and temperaments the same type of inquisitiveness, the same general pattern of research and appraisal which, when applied to the physical sciences, made the electrical industry what it is today.

OBVIOUSLY, we had no such lofty objectives as the preservation of free enterprise and our American way of life. We just had a mess of problems in our own back yard. Our situation was typical of the industry. The supervisory forces, and the reservoir of mature technical employees from which the management of an electric utility is normally replenished, revealed the unfortunate results of a long dearth of employment which extended from the lean depression years through the war. In that situation, the usual process through which people gravitate toward supervisory positions by reason of being next in line or in a related job, because of demonstrated technical ability, seniority, loyalty, diligence, etc., was not doing a good job.

In similar situations many companies plunged into various and sundry "management development" programs, assuming they had the answer to the apparent shortage of competent candidates for management. There is nothing wrong with such programs, provided they are properly constructed and applied, and further provided you do not expect too much from them. Management development procedures are like those of the diamond cutter. He can take a dark, shapeless mass and, by skillful shaping and polishing, come up with a fabulous diamond of rare beauty and perfection — provided he had a rough diamond to start with. If his raw material is a blob of glass, he can shape and polish it until doomsday but it will never be more than a dressed-up chunk of a very common material. So it is with candidates for management. No amount of training or experience will make first-class management out of individuals who do not possess the basic qualities required for supervisory and administrative work.

SO, our obvious conclusion was that we should make an intensive search for rough diamonds—individuals endowed by nature with the essential ingredients for management work—and, with a mini-

mum of shaping and polishing, they would develop themselves.

The conclusion was simple enough, but its fulfillment was immediately confronted with some very practical and very real obstacles which are also typical of the industry. As the organization had grown in size and complexity, it had become more impersonal and the work performed by nonsupervisory and many supervisory people had become highly specialized. The place might be loaded with potential management people who, because of narrow, specialized functions, had no opportunity to demonstrate their capacity for leadership. The cream could no longer come to the top because size and specialization had homogenized our working forces; but, as is the case with homogenized milk, we knew the cream was there some place.

Research was undertaken to find and adapt a new set of tools to the selection of people for management—instruments which, when properly used, would provide an objective means of measuring human attributes in at least five areas—basic intelligence, practical judgment, natural interests and preferences, aptitude for supervisory and administrative work (human relations aptitude), and, finally, the extremely complex matter of personality in terms of known, recognizable psychological traits and characteristics which could affect an individual's capacity for management work.

WHEN the average business executive hears the word "psychological" or "psychologist" he seems to conjure up a vision of a myopic long-hair with an armful of charts explaining why the schizophrenic Dr. Jekyl could be Dr. Jekyl when he wasn't being Mr. Hyde. The truth is that technical progress has not been confined to the physical sciences by a long ways.

The social scientists have been making tremendous strides in down-to-earth, practical industrial applications of their greatly increased knowledge. It is time that we get to know them better because theirs is the scientific know-how which will aid us in building a strong management for the future and, incidentally, making life easier while we are still pulling an oar.

Particularly in the utility field where large numbers of college-trained people are employed and where a high degree of technical competence can easily be confused with management capacity, a skillful, practical psychologist can be fully as valuable as a highly trained professional engineer. As a matter of fact, if you get the services of the psychologist first, you

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will not make so many mistakes selecting technical people.

We had the basic know-how and the trained technicians on our staff who had for many years administered a successful selection program at the employment level. However, selection in the management area for leadership and administrative characteristics was something different and at that time—1947—leading authorities on the development and use of practical selection procedures indicated that the literature on the subject yielded "little evidence of the successful use of tests in the executive brackets." Accordingly, it was not without some misgivings that we contemplated the task of integrating the relatively unbelieved, unaccepted social sciences into the process of selecting people for management in a highly technical business which had grown and prospered on the rigid backbone of the engineering sciences.

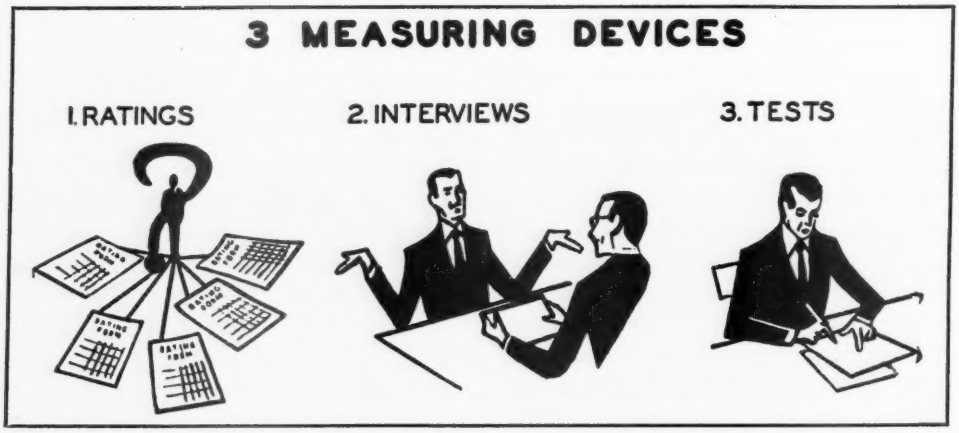
The research and development, the trials and errors, the laborious processing of volunteer "guinea pigs," the checking of appraisal results against actual performance, and the statistical analyses of validity consumed three years of groundwork before we were confident that we had a valid means of appraising management capacity and of predicting success or failure at various management levels, even in people who had never held a supervisory position—in fact, in people we had never seen before.

At this point some readers will say "malarky" or just plain "nuts." As a matter a fact, that is precisely what the skeptics in our own management said a while back. After watching the procedures in operation for seven years, witnessing the high degree of accuracy in predicting success and failure of people in management jobs, and seeing their own groups grow stronger, they now think the skeptics are "nuts."

The selection plan is well-balanced. It is not a magic formula; in fact, it is not even mysterious. Nor is it a gimmick that grinds out a "score." It does not substitute automation for human judgment. It does direct judgment in appraising the capacities of individuals and it does use professionally trained and skillful specialists in making the final appraisals.

In order to provide checks and balances, the evaluation process has three distinct parts. First is the subjective rating of an individual by a minimum of three, preferably five, work associates who are his superiors or his peers—never his subordinates. At least one, preferably two, raters should be from outside the employee's department. They know the employee well—on the job and frequently off the job. The characteristics on which they are required to rate an employee are well defined and the form is a simple one to use. We use the very simple procedure of providing a scale for each of eleven characteristics subdivided into several degrees from poor to excellent on which the rater can place a check mark at a point he believes measures the degree to which the employee possesses a specific characteristic, such as mental capacity, judgment, human relations aptitude, etc. The rater is also required to record his over-all opinion of management potential in terms of the various levels of management, such as general foreman, superintendent, department head, etc.

This rating procedure is, of course,



widely used in industry because it is a simple, orderly way of collecting one type of information; namely, personal opinions —sometimes just impressions. Unfortunately, such opinions and impressions are not consistently reliable, particularly where they relate to potential or undemonstrated capacities and accordingly should not be used as the sole means of evaluating people. We minimize the subjective character of ratings by using multiple judgment—three to five raters—and also by using two additional tools of evaluation which mark the point of departure from selection procedures ordinarily used.

A SECOND part of the evaluation process is what we call the "pattern" or "depth" interview. Here we turn to the skills of the industrial psychologist because we want information which the usual superficial interview will not produce, at least not in a form or "pattern" which can be properly evaluated in terms of such characteristics as temperament, logic, and insight into leadership and human relations problems.

The typical personnel man and certainly the average executive is quite sure that he is a good interviewer. I was. I could interview a person and get almost all the information which was already on the record. When trained psychologists came up with hitherto unnoticed strengths and weaknesses, foibles and phobias in people they had never seen before—but whom I thought I knew—and when their conclusions were found to be valid, it was time to admit that if the selection of future management were to be made as good as possible, the practical psychologist would have a very important rôle to play.

Although the results of an interview are normally classified as subjective criteria—that is, opinions or conclusions of the interviewer—they approach the objective when the interviewers are skilled technicians whose function is conducted in an impersonal, professional manner solely to obtain "clinical" information which will be used as fill-in material—side lights—angles —later on when the final appraisal is made using information from all sources.

THE third, and by far the most important, device for measuring manage-

ment capacity is a battery of objective tests. We currently use five and are experimenting with a sixth. By "objective" we mean that the personal element is largely removed. A camera is objective because it has no malice, no envy, and no personal prejudices or opinions. Whether the subject is Marilyn Monroe or Tugboat Annie, the camera gives an unbiased record and you proceed to make your own evaluation of merit. Hence, the tests, having no preconceived notions, scientifically explore the areas of basic intelligence, practical judgment, personality characteristics, natural preferences and interests, and human relations aptitudes.

AMONG the many characteristics of a human being which are subject to evaluation, the intelligence factor—the "IQ"—is the most widely used today. The intelligence tests are among the simplest and most valid but the "IQ" alone is, in no sense, a reliable indicator of who is, or is not, good potential management material. We have all learned that—the hard way. As a matter of fact, some of the case histories used to show how far off the beam an unguided selection can go, involve lopsided individuals whose IQ was practically off the standard scale but that is all they had. Excellent people in the right job—but not in management.

The personality analysis is the newest tool and one which can be correctly described as "psychological" or "psychometric." Its purpose is to reveal facets of character not readily observable to the rater or interviewer and frequently not recognized or understood by the person possessing them. The resulting appraisal of the individual is of great value as a new set of facts to check against what is already known about a present employee. It is of infinitely greater value in predicting the management capacity of a candidate from the outside or one who has never had an opportunity to demonstrate that capacity.

HAVING developed and validated the tools and procedures for appraising individual capacity for management work, the obvious next step was to find out what we already had "in stock" in the executive and administrative area. We had been painfully aware of some spots where the supervisory staff was too thin—no apparent qualified successors—but this did not necessarily mean that there was a net shortage of competent management people. What about some of the other groups that were keeping very quiet about the competence of their younger people? Could it be that they were overstocked?

The inventory covered every department, division, and group. In its application to individuals the only exemptions involved those whose future, because of age or other factors, was so clearly defined that an evaluation would have contributed nothing which might affect future planning.

Such a sweeping statement as to the scope of the inventory may create a picture of a lot of nice people being bull whipped into an unwilling and perspiring line-up headed for a grueling third degree. Actually, among the approximately 600 individuals "processed," nearly one-fourth were volunteers who had offered to assist in the early experimental work; most of the others enjoyed the experience and were genuinely interested; a few were unhappy about the whole thing. Even those who had concluded that their limitations were about to be exposed were quite

philosophical and good-natured about it. All in all, it was a gratifying example of how free American men and women accept a new idea and take it in their stride.

The inventory consumed another three years—very well spent. Now we really had something—a complete "balance sheet" of management man power — an exhibit of our human assets and liabilities and our reserves — so that the few men who must assume final responsibility for shaping the future could, for the first time, see in graphic form the entire supervisory force which is spread out over 12,500 square miles of operating territory.

EACH individual's folder contains a detailed analysis indicating whether his qualifications and capacities are above or below his present position; what potential, unused capacity he has for greater responsibility; his specific strengths and weaknesses; a prediction of his probable maximum capacity in terms of job level —and reasons why the predictions appear justified. Back of all that information are the files of the psychometrists containing records of interviews, the test papers, work histories, ratings, and other technical and confidential material.

Now that really does sound like tying tags on a lot of nice people — prejudging their future. It is! The basic characteristics evaluated seldom change, except possibly in later years and for the worse. Besides, what corporate top management does not tie tags on people and prejudge their future, almost every day of the year —and without the benefit of substantially accurate appraisals which, in this complex age, can only be supplied by proven, scientific methods administered by well-trained and competent specialists?

IMMEDIATELY after the inventory of present management was completed, a search for future management was undertaken among the nonsupervisory—usually union-represented—groups. In some areas the reserves we needed were found near the top of the list of skilled and senior workers. In other groups the procedures were carried out almost to the bottom. In still other groups we found nothing. Across the board, we discovered that we were rich in good future potential and in about the right proportions for the various levels of supervision. We cannot use them now but we know who and where they are and that gives us time to suggest voluntary enrollment in training courses and to arrange for desirable experience. The same procedures are used as a preemployment evaluation of all college-trained candidates for employment and the results dictate the placement of such individuals so that those who appear to have supervisory and administrative pos-

¶ "As *an industry, and as a nation, planning future management is a serious business and we cannot long afford the tremendous loss of capacity resulting from wasted talent and inferior substitutes simply because we have failed to translate into the selection of the human element the same progressive thinking and the same degree of skill we use in selecting components of property.*"

sibilities will not be permanently assigned to highly specialized work.

So, the question naturally arises — in what way do the evaluations help —what, if any, changes or improvements can result from the new management selection procedures? For one thing, we have stopped operating a burial ground for management talent. In this company or any other organization with a sizable group of employees, there is no real shortage of competent people for management, but you have to find them. On the other hand, there is no great surplus of talent, especially top-shelf stuff, so it is important to seek out and develop what we have. It is a very heart-warming experience to "discover" management talent buried in places where, in all probability, it would have remained buried and unused if the means of discovery had not been developed. The total discovery was great and the most frequent causes of burial, which exist in all companies, were:

Seniority rules and practices, like the 55-year-old man who at the time of his evaluation in 1953 had worked for thirty-two years on a manual bench work job. His capacity for supervisory work could not be demonstrated on the job and promotions had gone to senior men. He is now in a position equivalent to general foreman.

Geography—located at remote area headquarters, like the young fellow in a minor supervisory position located 250 miles from the main headquarters. He was practically an unknown quantity, now slated to understudy a corporate officer—he is that good.

Jealousy or prejudice, like the fellow who worked under a dominant superior who kept him submerged and out of competition—now superintendent over a large group of public contact people.

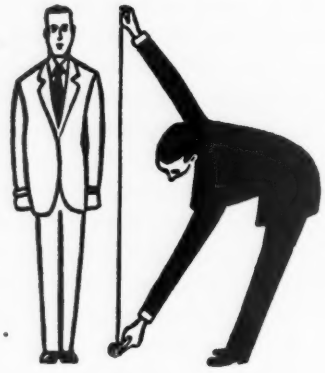
Specialization, an increasingly serious cause of burial for management talent, like the highly specialized accountant whose tests and interviews at the end of 1952 showed a high degree of frustration and a high level of management competence—now superintendent over a mechanical, service group.

The most immediate effect of the new procedures was that the predictions drawn from evaluations either avoided mistakes in making promotions and transfers or acted as object lessons on how to avoid mistakes in the future. Typical are predictions that individuals will succeed or fail in a given situation; predictions that apparently minor personality traits would become progressively destructive if supervisory authority were granted; predictions that certain "radicals," "bad actors," and "tough guys" are acting that way due to sheer job frustration and would make good supervisory people; an occasional prediction of an actual mental crack-up if given added responsibility; and many others—proved to be correct by the passage of time. Not with 100 per cent accuracy —but much higher than heretofore possible.

Some predictions are proved correct by simply doing what is recommended. Others are proved correct the hard way—by someone going contrary to the recommendations. Both things happened and although some of the results of ignoring predictions were temporarily unfortunate, they served, as part of a growing-up process, to confirm the validity of the evaluation procedures.

5 OBJECTIVE MEASUREMENTS

1. INTELLIGENCE . . . . . .
2. JUDGMENT . . . . . .
3. PERSONALITY . . . . . .
4. INTERESTS . . . . . .
5. SUPERVISORY APTITUDES . . .

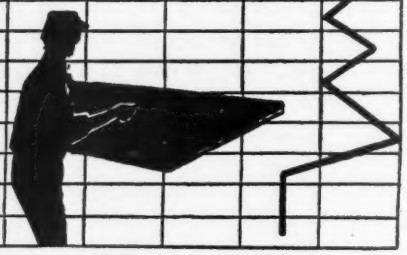


REPORT OF SUPERVISORY POTENTIALS

Name [redacted] Age 55 Date 5-21-53

ANALYSIS CHART

CHARACTERISTICS	POOR	FAIR	AVERAGE	GOOD	EXCELL.
GENERAL APPEARANCE					
ADMINISTRATIVE ABILITY					
SUPERVISORY KNOWLEDGE					
SOCIAL ADAPTABILITY					
PERSONAL MATURITY					
AMBITION AND INITIATIVE					
STABILITY					
INTELLECTUAL ADAPTABILITY					
TECHNICAL ABILITY					
PERSONALITY ADJUSTMENT					
SUPERVISORY ADAPTABILITY					



ANALYSIS SUMMARY

On the matter of future planning, any company knows the requirements of supervisory and administrative positions with substantial accuracy. Accordingly, if we can now evaluate the capacities of individuals with considerable accuracy—which we can—we have, in effect, turned on the lights in the area of future planning of management where we used to grope for want of clear-cut information.

In the planning of future departmental and divisional managements, we first set up for five years ahead "certain" and then ten years ahead "tentative." To a much greater extent than heretofore possible, the building of future management groups involves transfers across divisional and departmental lines, which gives a terrific boost to general morale.

We work primarily on the basis of future vacancies due to normal retirements. We know that unforeseen events, such as death, illnesses, resignations, transfers, etc., will require many changes in our "certain" and "tentative" organizations, but where that occurs we do not have to go back and start all over because we have adequate information on one or several competent alternatives in the same or closely affiliated group, or perhaps in some remote fringe of the territory. People cannot get lost and if their development is neglected that failure cannot be due to lack of information as to their potential. Training courses, management development programs, and job rotations never did anyone any harm, but they are expensive. With more accurate information available as to the probable maximum capacity of individuals there is no justification for hit-and-miss, trial-and-error development programs. Each move for training and experience purposes can be planned and an approximate time schedule prepared with much greater assurance than heretofore possible that the results will be as predicted.

The Wisconsin Electric Power Company program for management selection is not, and never will be, perfect. However, it has repeatedly demonstrated increased probability that individuals in management will be assigned duties and responsibilities for which they are best fitted. It has substantially ruled out the danger of promotions, or failures to promote, based upon favoritism or prejudice. It has removed much of the guesswork from the process of intelligently planning management succession. Most important, it has greatly minimized the possibility that well-qualified people will remain in blind alleys—unknown.

As an industry, and as a nation, planning future management is a serious business and we cannot long afford the tremendous loss of capacity resulting from wasted talent and inferior substitutes simply because we have failed to translate into the selection of the human element the same progressive thinking and the same degree of skill we use in selecting components of property. The time for bringing the application of the social sciences into phase with the physical sciences is long past due. A worth-while starting point is in the selection of people for management. The best proof that it can be done is that it has been done — and it works.

Public Relations—the Invisible Giant

The very intimate contact of public utility operations with the daily lives of the entire population underscores the importance of continued and concentrated application of the best thoughts and techniques of sound and improved public relations.

By BOOTH MOONEY*

At the base of a statue standing in front of the National Archives building in Washington, D. C., these words are engraved: "What is past is prologue." The thought is universally sound. It seems peculiarly suitable for application to the business of operating public utilities in the United States.

During the last quarter of a century our utilities have been faced with a tremendous and many-sided task. They have come through magnificently, meeting wartime and peacetime challenges of great magnitude. They are responding fully to the unprecedented demands being made on them today. If it is indeed true that the past is prologue, then the record the utilities have made up to now constitutes reassuring evidence that they will not falter in meeting the even greater responsibilities of the future.

These responsibilities include, as a matter of course, the providing of more and better utility service to a fast-growing and increasingly urban population. That basic function, it may be predicted with confidence, will be performed. But there is more the industry must do. There are other responsibilities which face the privately owned utilities.

One of these is that of making full use of the invisible giant of the business world—public relations.

*Public relations consultant, resident in Washington, D. C. For additional personal note, see "Pages with the Editors."

Why "invisible giant"? The term is apt: *Invisible* because the mechanics of a public relations program must remain unseen from the outside if the program is to be effective in the greatest possible degree; *giant* because the force of a soundly conceived and properly executed public relations program is literally immeasurable.

THE utility industry has learned a great deal about the vast potentialities of this unseen force. During these last twenty-five years, a period in which the industry has marked up such extraordinary accomplishments, public relations has come to be accepted as a major responsibility of industrial management. That is true of American business in general, and it is true of the utility business specifically.

Nearly all important decisions made by management nowadays have public relations implications, one way or another. So far as public utilities are concerned, the nature of managerial decisions is always likely to have a profound effect on regulatory and legislative problems confronting the industry. It is thus of the utmost importance that the utilities consistently place their best public relations foot forward.

Fortunately, they make a practice for the most part of doing precisely that.

The elements involved in the make-up of a sound public relations program are many and diverse. But there can hardly be any debate regarding which element is of primary importance. It is a sound management policy.

This means simply that a specific public utility—and the utility industry as a whole—must recognize and be prepared to meet the responsibilities it has toward its employees, its stockholders, its customers, the community or communities it serves, and the public in general. This is the foundation upon which, through the knowledgeable use of available channels of communication, a strong and valuable public relations program can be built. It is, as a matter of fact, the only lasting foundation upon which such a program can be built.

NO modern management would advocate or follow policies having about them any hint of the "public be damned" attitude which was the theme song of the muckrakers of yesteryear. It is no less important that management avoid the appearance of seeking to emulate the cringing oiliness of the character immortalized by Dickens as Uriah Heep. Either extreme is bad—bad for the industry and bad for the nation.

This is simply to say that the utility industry, having an affirmative story to tell, should tell its story in an affirmative fashion. The telling of the story is a function of public relations.

Utility executives have learned through experience that there are several distinct and important audiences for this story. It is essential that each of them be reached.

One audience is composed of employees. Utilities have been notably successful in reaching this audience. The average utility employee is proud of the company for which he works. He knows utility service is a vital factor in the lives of his neighbors and all the people in the community. He feels his own efforts represent a definite contribution in the rendering of that service. This average worker is therefore the best of all public relations representatives of the company. He is an essential link in the chain of good will which the company seeks to bring into being.

ANOTHER audience for the affirmative story the utility industry has to offer is made up of all the people living in individual communities — leaders of public thought, customers, potential customers. The whole population of the United States comprises yet another audience for the industry's story. And another is the government itself on its various levels.

It is obvious that these audiences overlap and intermingle. One affects another —as when a town plant manager, a member of the employee audience, makes a speech before a local civic club, or when a utility customer communicates his view of the service rendered him to a member of the city council or to his representative in the state legislature.

Even though this kind of overlapping and merging exists, the industry cannot afford to neglect any one of these audiences. Each of them must be given special attention.

The goal of the utility industry is to create that climate of public opinion which is most favorable to the smooth-running operation of sound management. The public relations program which accomplishes this purpose may be accounted successful. And by this measuring stick the public relations program of the utility industry ranks high.

Understanding is the keynote of the right kind — the successful kind — of public relations program. Nothing can be substituted for understanding. Most people have a tendency to shy away from the unknown. If they feel they are being subjected to an influence the nature of which they do not comprehend, they are likely to become suspicious and resentful of that unknown force. They will resist it.

Conversely, these same people may be expected to lend their support to policies which are clearly explained to them — if they are sound policies. They will cooperate in the attainment of business or individual objectives—if they are worthy objectives—which they have been caused to understand.

This is not merely a theory. Public opinion surveys have shown time and time again that public attitudes regarding specific issues change with the gaining by the people of a sympathetic understanding of the facts. This is of vital significance to the utility industry, since, finally, the people generally are the guiding force back of government policies, at whatever level, which affect the operations of public utilities.

THE line of communications between the industry and its several audiences

¶ "DURING *the last quarter of a century our utilities have been faced with a tremendous and many-sided task. They have come through magnificently, meeting wartime and peacetime challenges of great magnitude. They are responding fully to the unprecedented demands being made on them today. If it is indeed true that the past is prologue, then the record the utilities have made up to now constitutes reassuring evidence that they will not falter in meeting the even greater responsibilities of the future.*"

must be kept open. It goes without saying that this is a two-way function. The ideal public relations program makes adequate provision for listening to the people as well as talking to them. Industry must try to learn as well as strive to inform. Of course it is important to a given company for its policies, aims, and attitudes to be understood by the company's employees, customers, and neighbors. But it is of no less importance that the problems and views of these groups be understood by the company management.

Understanding is necessary. It must be reciprocal understanding.

Use of all the communication devices available to management has the single purpose of furthering understanding. The glossiest brochures, the most carefully prepared advertisements, the most professionally skillful television and radio programs, the best house organs, the most thought-compelling public addresses by company personnel—all these fail of their basic objective if they do not foster understanding back and forth between the company and the audiences it is endeavoring to reach.

THE over-all public relations problem of the utility business—that is, the problem of promoting reciprocal understanding—is as vast as the industry itself. This problem has many facets, assumes varied forms. It encompasses numerous endeavors—from dealing effectively and in a friendly fashion with members of a municipal governing body which must pass on a town plant rate increase to exerting proper and beneficial influence on the formulation of nation-wide policies affecting the whole far-flung industry. No aspect of the problem can in sound judgment be neglected. And, above all else, whatever complexities may arise in connection with meeting the problem must not be allowed to obscure the basic objective.

SOMETIMES—too often—we hear it said that public relations may be considered a tool of business.

The statement is dangerous. If it should be accepted at face value, the utility industry would never be able to realize the full potentialities of its public relations program. For public relations is not a mechanical thing. Public relations is not a blueprint. Public relations is more than an instrument—more than a mere tool of business.

Ideally, public relations is an active *partner* in business. The truth of that statement is evident when deliberate consideration is given to the nature of the elements which rightly enter into the utility industry's public relations endeavors.

The attitude of management toward its public and social responsibilities must be accorded first consideration. It is up to management to establish this attitude. It is up to the public relations executive or consultant to advise management as to the probable effects of the attitude established. That is clearly the function of a participant, not that of a tool.

This applies also with respect to specific policy decisions by management about matters affecting the public interest. It applies further to the carrying out of these decisions. The public relations people then have the responsibility—or certainly ought to have it—of providing management with logical reasons for or against making public release of all or part of the information regarding the decisions and the manner of their execution. And then,

The Free Enterprise Theme for Business

"FREEDOM is the rightful theme for business spokesmen—freedom of enterprise, freedom in government, individual freedom. This is the three-legged stool on which our American system stands. Our business world of private enterprise—and free because it IS *private—must not shirk in any degree its duty of continually placing before the people the facts of life about this dynamic economic system. The nature of the utility industry is such that it should assume an especially large share of this responsibility."*

of course, it is a function of public relations to communicate management's message to the public, or the several publics, at whom it is directed.

Now, these steps are not ends in themselves. They are not wheels going around just for the sake of motion. If they are so regarded, then management is not getting its money's worth for its public relations expenditures. The steps outlined above, if they are properly taken, definitely lead somewhere—and that somewhere is a point at which the recipients of management's message will accord a sympathetically understanding hearing to the facts presented.

In other words, the aim of a public relations program is, quite simply, to influence public opinion. The program has no other excuse for being. There is no reason for trying to ignore this fact or to gloss over it. There is nothing to be ashamed of in it.

Public opinion has the last word in a country such as ours. That being the case, the utility industry needs to seek and has a right to seek public understanding as a means of winning public approval of its own operations.

There is, to be sure, more to it than that. Business management in America has a public responsibility extending beyond itself—a responsibility to a society geared

by competition, to an economic system based solidly on free enterprise and private initiative.

It is both ironic and alarming that in this nation of unprecedentedly high living standards and unsurpassed personal freedom there should exist a vast area of ignorance concerning the workings of the economy which makes those living standards and that personal freedom possible. This is a dangerous state of affairs. Efforts to correct it must be carried forward continuously if our free enterprise system is to survive.

Perhaps nothing in the world is more terrifying than ignorance in action. We in this nation have on occasion witnessed this appalling phenomenon. At times the smog of misinformation and lack of information have extended upward into our highest governing bodies and our most respected educational institutions.

Economic illiteracy must be fought hard and constantly if only because its end product is too often corrosive, unthinking social unrest. We must make certain that the people of the United States are never so misled as to vote the country into economic disaster.

American business as a whole speaks through its public relations programs. The combined over-all program is thus the most effective means business has of translating and interpreting the facts of business operation to the intellectual and political leaders of the nation and to the body of the American people as well.

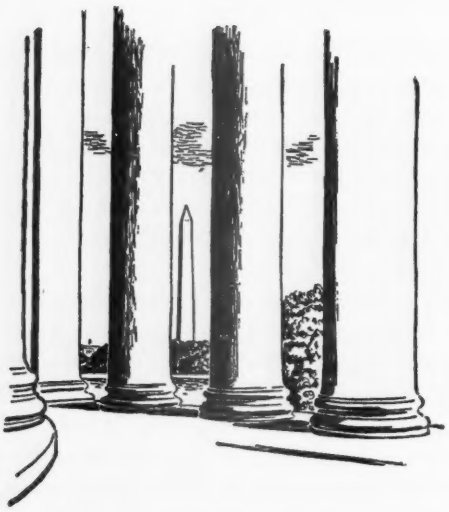
Freedom is the rightful theme for business spokesmen—freedom of enterprise, freedom in government, individual freedom. This is the three-legged stool on which our American system stands. Our business world of private enterprise—and free because it *is* private—must not shirk in any degree its duty of continually placing before the people the facts of life about this dynamic economic system.

The nature of the utility industry is such that it should assume an especially large share of this responsibility. It is a service industry which reaches daily into the homes of the people. It is an industry depending heavily on public understanding and good will for its continued progress. It is an industry which, at its best, exemplifies the highest and most praiseworthy tenets implicit in the doctrine of free enterprise.

Moreover, fortunately for itself and for the nation, it is an industry boasting an exceedingly high percentage of enlightened and forward-looking executives at the top management level. These men of imagination recognize the indispensable value of a continuing and ever-expanding effort to place their story in all its ramifications before the public their companies serve so well.

This is valuable knowledge they possess. The utility industry itself benefits from its application. So does American business as an entity. So, indeed, do the people as a whole—in the added comfort of everyday living and in their intensified awareness of the advantages the free enterprise system possesses over any other economic system devised by the mind of man.

The invisible giant that is public relations has been put to work by the utility industry for the general good.



Washington and the Utilities

McKay Fights Back

In a fighting speech delivered in Portland, Oregon, on August 24th, Secretary of Interior McKay hit back at what he said were "misleading and false statements made for partisan political advantage." Speaking before the Portland chapter of the Izaak Walton League, the Secretary reviewed the department's policy and practices in the fields of conservation and resources work.

He said the sprawling Pacific Northwest Bonneville Power Administration, far from being dismantled as some political opponents said it would be under the Eisenhower administration, has substantially expanded its facilities and service. He said that since he has been Secretary, Bonneville has collected more than $7,000,000 in net revenue, has integrated a total of 1,260,000 kilowatts of federally produced power into the system, and has built 1,000 miles of transmission lines and 34 new substations.

"Although I am an advocate of hydroelectric development, I have opposed construction of dams where damage to wild life, fish, or recreation will exceed the power benefits," McKay said.

On the subject of proposed hydroelectric development in Echo Park, he said the late President Roosevelt's order creating Echo Park made reservation for possible later hydro development. "In view of this reservation and the need for the comprehensive development of the Rocky mountain region, the department could not oppose the Echo Park undertaking" in the Colorado river project, he said.

McKay said there had been speculation in some quarters on whether the department intends to "give away" several waterfowl and big game refuges. These refuges, as well as national parks and forests, he said, are an irreplaceable national asset. "I feel strongly that these resources of which the federal government is the guardian on behalf of all the people should and must be preserved," he said. The government will not surrender "any natural resources that should remain in the custody of the people."

He added that his department has not and should not be a party to imposing state Socialism on that portion of the economy that can best be developed through individual and local enterprise.

Discussing the so-called "tidelands,"

McKay said that since the law was enacted affirming state ownership of the tidelands, a total of $250,000,000 as bonus payments in oil and gas leases executed, plus ground rentals, had been turned into the Treasury.

Fast Start on Gas Bill?

PROPONENTS of the House-approved Harris Bill to exempt independent producers from full FPC jurisdiction are going to have a difficult tactical decision to make before Congress meets again in January. In a word, the decision is whether to throw everything into a bold "blitz" attack in the Senate right after the session opens, or try to dicker with the bill's opponents on getting the bill to a vote later on in the session.

It is conceded even by the bill's opponents that there are ample votes in the Senate to pass the bill if it could be brought to a vote immediately. The bill has been reported favorably by the Senate Interstate Commerce Committee and is now on the Senate docket where it could be taken up by the sympathetic majority leadership. But there the catch comes in the form of a tough core of opposition Senators, including many prominent Democrats from such "consuming" states as Tennessee, Illinois, Minnesota, New York, and New England states. Experience has shown that twenty determined Senators can delay indefinitely the Senate passage of a controversial bill, such as the proposed fair employment practices legislation.

What the majority leadership fears in this case is that such extended debate would engender considerable bitterness and could even stir up a party split on the eve of its national convention—a split which could wreak damage on the so-called "utility give-away" issue which the liberal Democratic wing has been building up so tenderly—probably in default of more nourishing issues. True, the "utility give-away" issue is based mainly on the public power question, with such overtones as Dixon-Yates and Hell's Canyon. But passage of or even identification of its leadership with a bill which is supposed to increase the price of gas to millions of American gas consumers (according to the favorite arguments of the bill's proponents) could embarrass if not plague the Democrats during the coming campaign.

UNDER those circumstances, there would be considerable temptation on the part of the Senate leadership to shove the whole question aside for another year, or until after the campaign and the presidential election are out of the way. At this writing it would appear, therefore, that the most likely strategy for the bill's friends would be to get on the ball right after the session whistle blows, and to try to get it to a floor vote in January, if possible—before the opposition can generate much steam on its own. The only trouble with that is the opposition might generate a good bit of steam between now and next January.

It is a difficult choice—whether to throw everything into one grand offensive or play the bill more cautiously in the hope of better breaks at a later time. One thing is certain. If the bill does come up in the Senate and then has to be set aside because of "extended debate" and "pressure of other major matters" (the usual euphemisms used by the Senate leadership when the FEPC bills have to be set aside perennially), the chances for satisfactory gas producer legislation—ever—would become very small indeed.

THE production industry lawyers are facing even more difficult problems than the legislative tacticians. They have

to solve the problems of what to do about the FPC if the bill fails to become law, and an almost equally puzzling alternative, what to do about the FPC if the Harris Bill *does* become law. Offhand, one might think that passage of the bill would settle the FPC problem of the production industry. But such is far from the case.

Assuming that the Harris Bill passes and becomes law in substantially the same form in which it passed the House by a narrow margin of six votes, producers will still have to comply with some preliminary regulations and perhaps continuous inspection—just to enable the FPC to determine whether it has jurisdiction. In other words, producers who still regard this legislation, in its present form, as an automatic exemption from all FPC controls, could be in for a sad awakening. Legal observers recall a similar situation following passage last year of the Hinshaw Bill. Under that law, intrastate distributors of natural gas not for resale, supposedly exempted from FPC controls, found that (under FPC regulations) they virtually had the burden of proving to FPC their particular right to enjoy the exemption. To do that, in itself, required a certain amount of submission to FPC inspection and control.

IN the case of the producers affected by the proposed producer legislation (Harris Bill type), it is assumed that the commission will have to make rules to aid in the clarification of the boundaries of the jurisdictional exemptions—particularly in the case of escalation contracts. Permanent review procedures would be needed, in all probability, to account for periodic changes in producer status. Such rule making would almost inevitably lead to test litigation in the courts. What the courts might decide or interpret regarding such regulations, no one can guess. Experienced lawyers in the field well remember the vigorous opinions of the U. S. Supreme Court members in the Phillips Case.

It may be somewhat *lese majesté* to suggest that the highest tribunal would even indulge in any action remotely suggesting personal pique. But lawyers generally agree that (*"ceteris paribus"* as the lawyers would say) the federal courts have not traditionally been too enthusiastic or sympathetic about what some cynics might bluntly call "nullification legislation" (to overrule previous court decisions). In fact, such laws generally encounter pretty strict "construction" when and if they get back into the courts on test appeals.

Stoking up the "Power Issue"

SENATE Democrats are preparing a major assault on the administration's power policies in obvious hopes of creating a vote-making issue for the 1956 elections. To keep the Dixon-Yates controversy, already worn somewhat thin, in the public eye, from fading away, the spotlight will be turned on the broader aspects of the administration's power policy, regarded as politically vulnerable.

Beginning this month, two Senate subcommittees will conduct joint hearings on: (1) the controversial FPC decision in the Hell's Canyon Case — authorizing the Idaho Power Company to build three dams on the Snake river which would knock out any further possibility of a single federal high dam; (2) the status of and facts surrounding the proposed merger of Puget Sound Power & Light Company and Washington Water Power Company; (3) the Interior Department's policies with respect to the "preference" clause for public agencies at federal hydroelectric plants; and (4) the administration's partnership

program. The hearings will be conducted by the Senate Judiciary antimonopoly subcommittee, headed by Senator O'Mahoney (Democrat, Wyoming), and the Interior Committee's Subcommittee on Reclamation and Irrigation, headed by Senator Anderson (Democrat, New Mexico).

In the House, the attack on power policies and programs was to be led by the Government Operations Subcommittee, headed by Representative Chudoff (Democrat, Pennsylvania). The group planned to hold public hearings in cities in four different power areas between August 29th and September 15th. These were scheduled to open in Springfield, Missouri, August 30th, with testimony from co-operatives and municipal systems in Missouri, Arkansas, and Oklahoma on Southwestern Power Administration operations and policy, which Democratic members of the subcommittee charge have compelled the co-operatives in some instances to integrate with private utility systems, allegedly resulting in higher rates to consumers and the eventual destruction of public power systems.

The House group was to go to Atlanta, Georgia, on September 2nd.

No "Hurricane Session" Likely

A special session of Congress to meet the northeastern flood emergency resulting from rains following the twin hurricanes "Connie" and "Diane" was not expected to materialize. This, of course, would have given President Eisenhower an opportunity to put before Congress once again, the highway legislation which he requested earlier. The President promised six governors of the flood-damaged states that he would talk immediately with congressional leaders about the need for calling a special session of the Congress.

Federal resources will be placed at the disposal of the wrecked areas in an effort to restore communications and public facilities. The federal-aid program will be directed principally toward repair and rehabilitation of public water systems, streets, schools, and clearance of debris and litter where it is a health and safety hazard. Much of this work may be done under the direction of Civil Defense Administrator Val Peterson.

Utilities and other seriously damaged businesses in the disaster areas were qualified to apply for emergency loans to the Small Business Administration, which inherited this particular responsibility from the old Reconstruction Finance Corporation.

Congressional leaders, generally cool to the special session idea, are considering alternative presidential authority for taking care of disaster relief. Senator Hayden (Democrat, Arizona), of the Senate Appropriations Committee, and Representative Cannon (Democrat, Missouri), his opposite number in the House, raised the interesting possibility that the President might transfer funds appropriated for rivers and harbors and specific flood relief projects. Cannon referred to the funds assigned to the Army Corps of Engineers for reconstruction work.

If such funds are diverted, however, it would mean a slow up of construction activity on the projects planned in other areas for the relief of the flood-devastated New England and mid-Atlantic coastal areas. If such transfer of funds should be made with the informed approval of the majority leaders in Congress, the emphasis on emergency relief in the East, compared with what has become routine project spending in the West, will be demonstrated not only to the Congressmen but to their area voters as well.

Wire and Wireless Communication

Gary-General Telephone Merger

THE big news in the communications industry world last month was undoubtedly the announcement of a pending merger of the nation's two largest non-Bell telephone systems—General Telephone Corporation and Theodore Gary & Company. Stockholders of both companies will be asked to approve the plan at meetings scheduled for September 29th. The proposal is also subject to the approval of the Securities and Exchange Commission.

If consummated, the merger will create a system serving about 2,500,000 telephones in 30 states, with large stock interests in telephone companies outside the United States, and with manufacturing operations in Canada and Europe, as well as in this country. After the merger, General Telephone would have assets that are now approaching the $700,000,000 mark and are expected to pass that figure by the end of the year.

Among the properties acquired by General Telephone would be Automatic Electric Company, the country's largest manufacturer of telephone equipment with the exception of the Bell system's Western Electric Company. Automatic Electric is a Gary subsidiary and operates plants at Brockville, Ontario, Antwerp, Belgium, and Milan, Italy, as well as in this country. It is credited in the industry with having pioneered the development of dial telephones and automatic switching equipment. General Telephone also has a manufacturing subsidiary, Leich Electric Company.

Theodore Gary & Company controls two subholding companies, Continental Telephone Company and Associated Telephone & Telegraph Company. Practically all Gary telephone properties are operated by subsidiaries of Continental, while Associated owns Automatic Electric and a few scattered telephone properties. Gary has a 51 per cent interest in Continental, 77 per cent in Associated. Gary also holds, through control of Anglo-Canadian Telephone Company, a 37.5 per cent stock interest in British Columbia Telephone Company, serving more than 350,000 telephones in British Columbia.

BOTH General Telephone and the Gary-controlled Continental Company conduct their telephone operations through subsidiaries organized on a territorial basis. Both systems operate, sometimes with adjacent territories, in eight states: Texas, Oklahoma, Wisconsin, Illinois, Michigan, Indiana, Ohio, and Kentucky. In addition, General Telephone has opera-

tions in thirteen states: Montana, Washington, California, Idaho, New Mexico, Arkansas, Louisiana, West Virginia, Virginia, Pennsylvania, New York, Vermont, and New Jersey. Continental has service in nine others: Nebraska, Kansas, Iowa, Minnesota, Missouri, Tennessee, Georgia, North Carolina, and South Carolina.

The largest minority of Continental stock not under Gary ownership is widely held by the public. The smaller non-Gary minority holdings in Associated is said to be in the hands of only a few persons. While the exchange offer in the pending merger plan is only for stock of the parent Gary Company, possibility was seen that General Telephone might move ultimately to acquire Continental and Associated stock now in the hands of outsiders. There was no confirmation of such an intent, however. Most of General Telephone's present subsidiaries are wholly owned, with only a few very small minority interests outstanding.

THE merger plan was announced jointly by Donald C. Power, president of General Telephone, and Frank S. Spring, chairman of Gary. It provides for Power's continuance as president of the enlarged company. Spring would become a director of General Telephone Company. Theodore S. Gary, president of Gary Company, and grandson of its founder, would become a director and vice president of General Telephone. A. E. Carlson, Gary's executive vice president, would become a vice president of General Telephone.

The two executives, Power and Spring, joined in saying that the merger would "result in a better integrated and more efficient telephone operating system," strengthened by manufacturing activities. Presumably a later step, after the merger is completed, would be the consolidation of some of the territorial operating subsidiaries of the two systems, where they are in adjacent areas.

IF the merger is consummated, General Telephone will have total assets of $639,444,000 and do an annual business of $307,000,000 on the basis of 1954 revenues.

It will still be exceeded, however, by the huge Bell system, which has assets of more than $11 billion and operates 44,000,000 telephones.

Bell Unveils 'Videophone' In San Francisco

A REVOLUTIONARY but well-known device in laboratory circles, known as "videophone," was given a public demonstration late last month in San Francisco. Developed by the Bell Telephone Laboratories and an organization called Kay Lab of San Diego, the videophone is actually a television-telephone. The device includes a 10-inch TV screen which shows the image of the person on the other end of the line. He or she in turn sees you on a similar screen.

While a group of reporters tried to outdo each other with such quips as "What happens if the telephone rings while you're in the bathtub?" Noel E. Porter, chairman of the electronics show and convention, demonstrated the instrument. Sitting in the Fairmont hotel on top of Nob Hill, Porter placed a call to San Francisco Mayor Elmer E. Robinson, who was in the Civic Auditorium a mile away. "This is an instance where seeing is believing," Mayor Robinson said.

Kay Lab officials said the videophone probably would be used in industry first, but they predicted it was only a matter of time before every home in the country would have one.

New Rural Telephone Designed

THE latest development in telephone service for rural areas is a watertight metal box powerful enough to carry voices across 50 miles of terrain without the usual telephone wires and poles. The microwave relay system can link isolated villages without phone service to the nearest point on a "main line" or central exchange.

In order to permit setting up outdoors, the "telelink" contains its own ventilating system controlled by a thermostat. The box is attached to a cable connecting with ordinary 110-volt household current. The electronic beam cannot be disrupted by hurricanes, ice, storms, static, or other common forms of interference.

Besides carrying the actual voice messages, the microwave system provides full selective ringing. This means that when one phone rings, no other phone on the hookup rings. The device is made by Raytheon Manufacturing Company, of Waltham, Massachusetts.

REA Makes Five Phone Loans

THE REA approved loans for improvement of rural telephone service, totaling $1,336,000 for the period August 14th to 20th. A Tennessee co-op, North Central Telephone Co-operative Association, received its third REA loan, this one for $330,000. Two previous loans bring the total lent to this co-op to $2,185,000. The loans are being used to construct a modern telephone system designed to serve 3,975 rural subscribers in Tennessee and Kentucky counties.

The Triangle Telephone Association in Montana received its second REA loan for a total of $1,319,000. The co-op's completed system will consist of 1,800 miles of line and 12 dial offices. A loan of $68,000 was approved for the Penfield Telephone Company of Luthersburg, Pennsylvania, a commercial borrower.

A new REA borrower is the Solon Springs Telephone Company in Wisconsin which was granted a loan of $229,000 to improve service; while the Northeast Florida Telephone Company was granted a loan of $344,000 to aid in converting its system to dial operation and add facilities.

Ex-Bell Official for Weapons Research

THE Army assigned its highest priority to research and development with the appointment of William H. Martin as Army director of research and development. Wilber M. Brucker, Secretary of the Army, announced Martin's appointment to the new position at the Pentagon.

Martin, a retired vice president of Bell Telephone Laboratories, is now deputy assistant secretary of defense for applications engineering. Brucker said the appointee would exercise the same degree of responsibility as an assistant secretary, and would be given complete authority over Army research programs.

The appointment answers some criticisms of the Hoover Commission on Organization of the Executive Branch of the Government. The commission has said that some research functions suffered because of overlapping activities. Improved Army organization is expected from the new appointment. In announcing the appointment Brucker said: "The Army fully recognizes the technological competition and rapid breakthrough in the realm of new weapons being accomplished by scientists everywhere in the world."

Financial News and Comment

By OWEN ELY

Return Allowed in Utility Rate Cases

ARTHUR ANDERSEN & Co. have prepared a new edition of their well-known brochure, "Return Allowed in Public Utility Rate Cases," which now covers some 930 commission and court decisions during the period 1915-54. *Public Utility Reports* and other case reprint services were used as source data. The digests of decisions indicate the rate of return allowed and the amount and type of rate base approved. Comments are included to provide a more complete understanding of the various factors considered by the commissions and courts in determining the return and the rate base.

We reproduce from the brochure four charts showing the returns allowed historically to electric, gas, telephone, and water utilities during the years 1915-54. In the year 1954 the range of these rates of return narrowed somewhat as compared with 1950-53. Following are the data for recent years, giving for each year the rate most frequently allowed in that year's decisions:

Year	*Electric*	*Gas*	*Telephone*	*Water*
1954	5.7%	6.3%	6.0%	6.0%
1953	6.0	6.3	6.0	—
1952	5.7	6.3	6.0	5.7
1951	6.0	6.0	6.0	5.3
1950	6.6	6.0	6.0	6.0
1949	5.7	6.0	6.0	6.0
1948	6.0	6.0	5.5	—
1947	6.0	6.0	5.5	—
1946	5.0	6.0	—	—
1945	5.6	6.5	5.5	—

"BECAUSE rate of return and rate base are compliments," the brochure points out, "neither is significant in the return determination without consideration of the other. They are companion factors, and the reasonableness of the end result cannot be evaluated by reference to either one alone. . . . Historical and current costs of capital, capitalization, and outstanding securities, dividend rate and per cent of earnings paid out, diversification of revenues and growth, construction requirements, efficiency of management, return earned by similarly situated businesses, and general economic conditions are frequently considered in determining the appropriate rate of return. Book cost, prudent investment, original cost, reproduction cost new, price level trended cost, adequacy of service, and economic usefulness of the utility property

DEPARTMENT INDEX

are given varying weight in the valuation of utility property."

Sketching the long history of utility rate regulation, it is pointed out that most state commissions earlier followed the rule of "fair return on fair value" embodied in the 1898 Smyth *v.* Ames decision of the Supreme Court. Fair value included original cost when first dedicated to public use, reproduction cost, and other factors. During this period, rate of return received relatively little attention, prevailing interest rates and economic trends being major factors.

THE Supreme Court's 1944 decision in the Hope Natural Gas Case virtually canceled Smyth *v.* Ames, releasing the commissions from any federal constitutional mandate regarding fair value, and exempting them from judicial review except with respect to state legislation. Following this decision some nineteen states changed from fair value to original cost, and eight others also used original cost as equivalent to fair value.

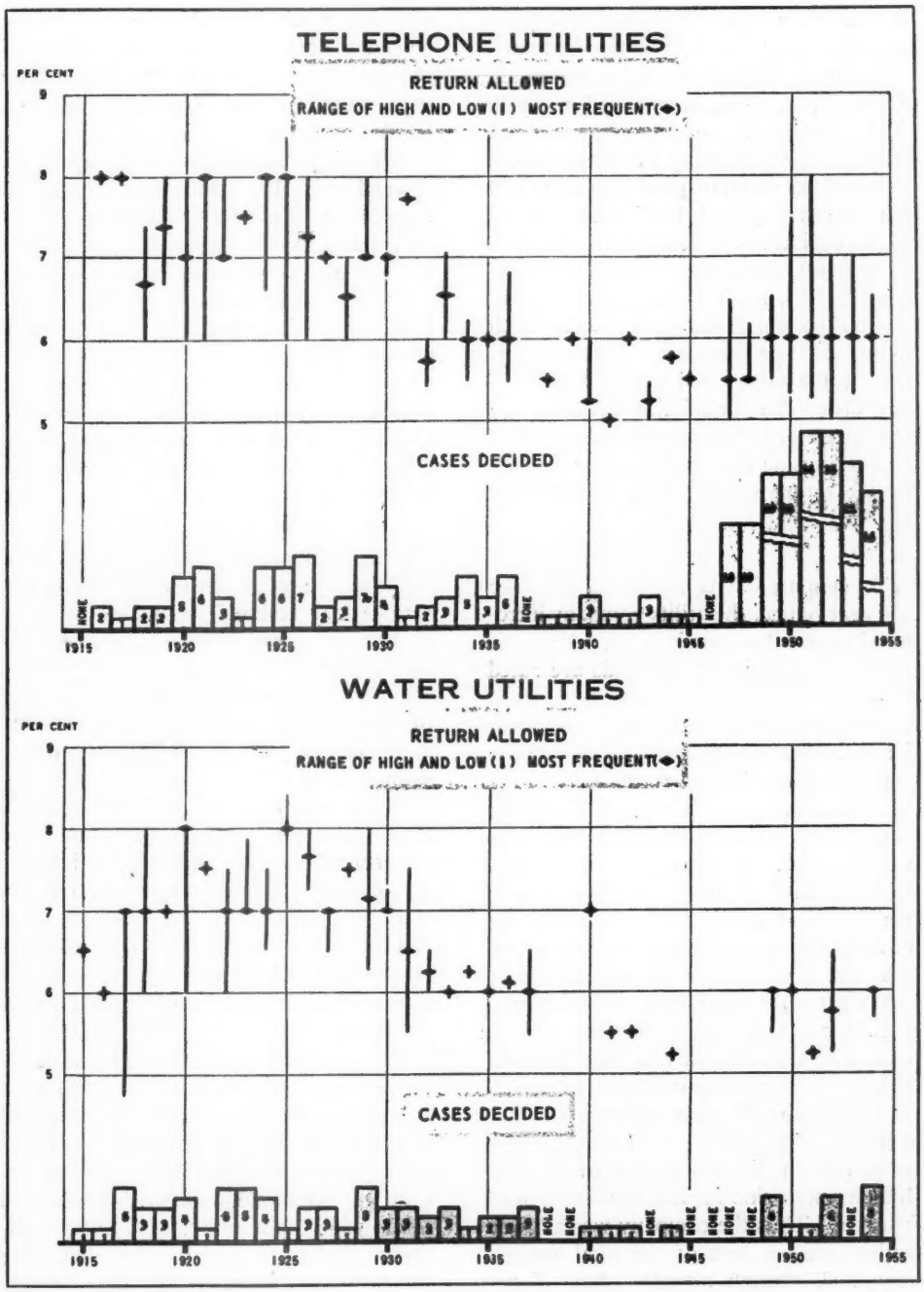
In the meantime, however, the inflationary period during 1940-50 substantially increased the replacement cost of retired property. Continued enforcement of an original cost rate base thus worked an injustice against the utility companies. But it took time to reverse the trend to original cost, and it is only in recent years that the courts have acted to do so. Since 1950, the courts in Delaware, Illinois, Maine, Maryland, and North Carolina have reversed commission rulings on original cost, apparently restoring the fair value concept in those states.

Meanwhile, greater attention has been paid to interpreting and refining the concept of fair rate of return. "Cost of capital," *i.e.*, the amount of interest and dividends (plus contribution to surplus) in relation to the rate base, together with money market data, have been explored by the commissions. The brochure states:

> More often commissions evaluated embedded bond interest and preferred stock dividend requirements in relation to current market opportunities for refunding. Substantial weight was given to current stock capital costs developed from earnings-price and dividend-price ratios and cost of flotation studies. In some cases, notably telephone, return allowances were based on earnings needed to service outstanding securities, including continuance of established common stock dividends. The tendency in rate of return determinations since the Hope Case has been to reduce return requirements to accounting and statistical analysis. A growing number of cases have been decided on the basis of calculated earnings needed to sustain existing capital structure and provide for new money at going market rates.

THE accompanying table on page 415 is a summary, which we have prepared in convenient alphabetical form, showing the conclusions reached by Arthur Andersen & Co. with respect to the predominant factors currently being recognized or used by the state commissions. In converting the data into abbreviated form, it is possible, of course, that the meaning of the original text in the brochure may have been distorted slightly, so that reference to the text should be made where exact definitions are desired. It is also possible that other analysts might draw somewhat different conclusions in some of the cases than Arthur Andersen & Co. have done.

In 1955 there have been several interesting cases, reference to which may supplement the summary prepared by Arthur Andersen & Co. Two of these were in California, where rate increases were granted



Source, Arthur Andersen & Co.

to California Electric Power Company and San Diego Gas & Electric Company.

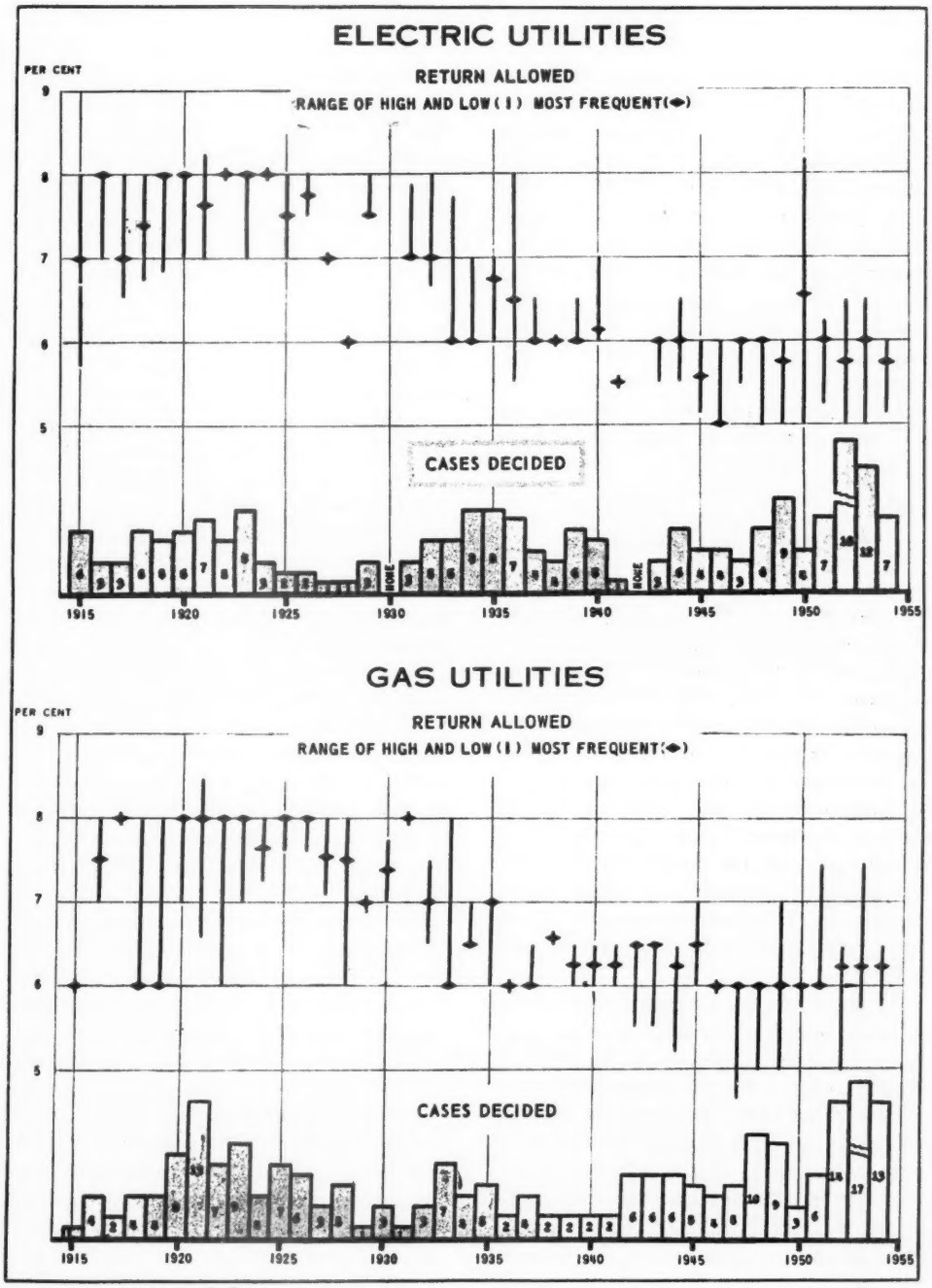
California Electric Power's application of December, 1953, as amended in April, 1954, sought a revenue increase of $1,185,400, representing a return of about 6.25 per cent on an original cost rate base, this rate being considered necessary to attract capital in the competitive markets. Estimates of the earned return on the rate base in 1954, made by the applicant and by the commission's staff, were both around 5.40 per cent, and other exhibits filed by the utility and the staff differed very little. The commission reviewed the interest rate on the company's bonds and the earnings on the common stock, including the return expressed as a percentage on equity capital.

To support its request for a 6.25 per cent return, the utility company introduced an exhibit showing that 54 electric utility companies, whose bonds are rated A by Moody, earned an average return on invested capital of 6.35 per cent over the three-year period 1951-53. While the commission admitted that this exhibit was "informative and a factor which can be considered," it found that 6 per cent was a fair return for the applicant to earn in the future on its California electric operations. However, "to compensate for an admitted downtrend in the rate of return and in order that the applicant may earn such 6 per cent return for the future, a 6.25 per cent rate of return will be applied to the adopted rate base of $63,630,000 for the estimated year 1954. . . . or an additional gross revenue requirement of $1,207,000 . . . (which) compares with applicant's request of $1,185,400 plus provision for a $32,000 fuel price increase." Thus the company was allowed within one per cent of the total amount requested, though actually about 7 per cent more will probably be lost if the company does not accept the authorized increase in rates in the San Bernardino area where it competes with Southern California Edison.

San Diego Gas & Electric Company on December 22, 1954, sought an increase in electric revenues of $4,826,600 or 18 per cent, based on the estimated year 1955—the first electric rate increase requested in over thirty-four years. However, its Exhibit No. 23 indicated that the new rates actually proposed would yield an increase of only $4,444,300. Hearings were held during the period February 2-June 17, 1955, and a decision was handed down July 18th — an unusually prompt determination.

The company's exhibit showed that the rate of return on total plant and service had declined from 5.84 per cent in 1953 to an estimated 4.32 per cent for 1955, and it requested a return on the electric rate base of 5.9 per cent. A study of the electric department (only) for 1955 showed a return of 3.99 per cent as estimated by the company, and 4.06 per cent as estimated by the commission's staff. In support of its request for a 5.9 per cent return, the company's Exhibit No. 38 showed that earnings realized on equity capital by 33 electric and gas utilities in 1954 averaged 11.39 per cent. The commission determined that 5.9 per cent return was fair and reasonable and granted an increase in revenues of $4,326,000.

It is interesting to note that a consulting engineer was retained to prepare an analysis of cost of service. This showed variations in the rate of return from 1.56 per cent for municipal power to 9.34 per cent for commercial power. The method used in this study was known as the load-factor method in which, after deducting the customer component and after directly



Source, Arthur Andersen & Co.

assigning certain expenses such as fuel, the remaining fixed charges and operating expenses were segregated on the basis of the average demand and excess demand.

Iowa-Illinois Gas & Electric Company has been having some rate difficulties with municipalities in the state of Iowa (where there is no state commission). A lengthy decision was recently handed down by the district court for Webster county, granting the company a fair value rate base and a return of 6 per cent or more, in the Ft. Dodge gas case. The management considers the decision as quite favorable and likely to prove of help in solving its other rate problems in Iowa.

Putting the Brakes on Borrowing

IN the spring of 1954 the administration was concerned with the moderate recession which then seemed to be gaining headway. But now, with business booming and inventories and borrowing on the upgrade, Washington seems to be applying the credit brakes, so that the danger of overproduction and inflation will be checked. However, Federal Housing Chief Albert Cole said the government's recent tightening of home-buying credit under its insurance program was a move "to let up on the accelerator—not put on the brakes."

Early in July the Federal Reserve held informal conferences with a dozen top finance company officials to discuss the problem of too liberal credit terms. No official report of the meeting was released but it was generally thought that the board was willing to leave the solution to the industry itself, especially as it can no longer regulate instalment terms. Apparently as an immediate result, the General Motors Acceptance Corporation warned its dealers to "go slow" in extending easy credit to car buyers. Universal C.I.T. Credit Corporation issued a study pointing out that in the first half of this year $8.6 billion has been borrowed against cars worth about $11 billion, while payments against old loans totaled $6.4 billions. In the entire postwar period, consumers incurred debts of $84 billion to buy cars and repaid $72 billion, or 86 per cent.

FORD, on the other hand, issued a statement indicating its belief that auto credit is not too high. The company pointed out that while auto credit outstanding July 1st reached a record $12.5 billion, liquid assets (cash, bonds, stock) had risen to $220 billion. Thus auto credit currently is 6 per cent of liquid assets compared with 3 per cent in 1939. Delinquencies are currently running at the rate of only one per cent compared with three per cent in 1935-39.

Total instalment credit of all kinds is now approaching $25 billion, having risen $765,000,000 in June. The present figure compares with $14 billion in 1950 and $6 billion in 1940. As a percentage of disposable personal income, instalment debt is now considerably higher than at any time since 1939. While this debt may not be unduly burdensome as long as incomes are high and continuing to rise, a reversal of the trend could easily produce difficulties for those overloaded with such debt.

According to an SEC report, individuals saved only $1.7 billion in the first quarter of 1955, bringing total savings to about $590 billion. This compared with $2.8 billion in the first quarter of last year and $4.1 billion in the last quarter in 1954. On the other hand investment in both government and corporate securities gained slightly over last year, amounting to $2.1 billion as compared to a record $2.2 billion in the second quarter of 1953.

SUMMARY OF RECENT STATE AND FEDERAL COMMISSION OPINIONS

	Rate Base		*Rate of Return—Factors Recognized*			
	Orig. Cost	*Fair Value*	*Cost of Capital*	*Attrition Due to Inflation*	*Risk Differentials*	*Competition For Capital*
Alabama	a		e	f	g	
Arizona			e			
Arkansas	a		e	f	g	
California	a		d, e	f	g	h
Colorado	a		e	f		
Connecticut	a		d	f	g	h
Delaware		c*	e			
District of Col.	a		e		g	h
Florida	a		e	f	g	h
Georgia	b		d	f		
Idaho	a		d, e	f		
Illinois		c*	e			h
Indiana		c	e			
Kansas	b		e			
Kentucky	b		e		g	
Louisiana	a					
Maine		c*	e			h
Maryland		c*	e			
Massachusetts	a		d, e			
Michigan		c	d, e		g	
Minnesota	b					
Missouri	a			f		
Montana		c	e			
Nebraska			e			
New Hampshire	a		d, e	f	g	
New Jersey	b		d		g	
New Mexico		c				h
New York	a		d, e			
North Carolina		c*				
North Dakota		c				
Ohio		c	e			
Oklahoma	a		e			
Oregon	a					h
Pennsylvania		c	d			h
Rhode Island	b					
South Carolina			e	f		
South Dakota	a		d, e	f		h
Tennessee			e			
Texas			e			
Utah	a		e	f	g	
Vermont	a		e		g	h
Virginia	a				g	
Washington	a		e			
West Virginia	b		e			
Wisconsin	a		e			
Wyoming	a		d		g	
Hawaii			e			
FPC	a		d		g	

a—Original cost explicitly adopted. b—Fair value rate base prescribed by statute, but commission gives sole or predominant weight to original cost. c—Law specifies fair value but commission sometimes stresses original cost. c*—Court decisions have reversed original cost decisions by commissions. d—Emphasis on historical interest and preferred stock dividend costs, and current common stock earnings-price ratios and yields. e—Emphasis on present interest and preferred stock dividend costs, and common stock dividends plus reasonable excess earnings. f—Attrition of earnings due to inflation recognized through concessions on rate base or rate of return. g—Consideration given to risk differentials of type of utility service, geographical location and market, and size and economic stability of the industry. h—Substantial weight given to evidence of current earnings opportunities in other industries.

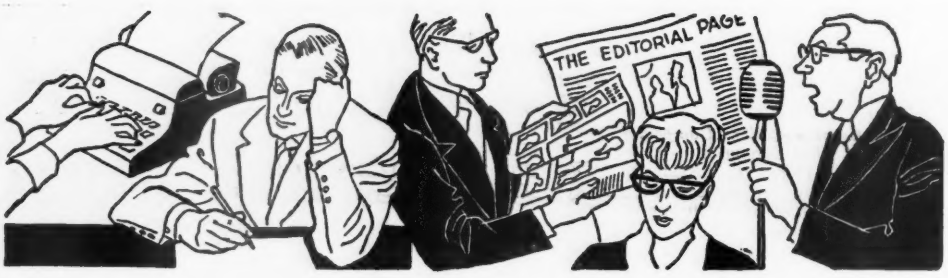
RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

1954 Rev. (Mill.)			8/24/55 Price About	Dividend Rate	Approx. Yield	Share Earnings* Current Period	Share Earnings* % Increase	Share Earnings* 12 Mos. Ended	Price-Earns. Ratio	Div. Payout	Approx. Com. Stock Equity
		Pipelines									
$ 4	O	Alabama-Tenn. Nat. Gas	19	$ .60	3.2%	$1.65	20%	June	11.5	36%	40%
14	O	East. Tenn. Nat. Gas	11	.60	5.5	.58	41	June	19.0	103	13
44	S	Mississippi Riv. Fuel	30	1.40	4.7	1.83	9	June	16.4	77	54
48	S	Southern Nat. Gas	34	1.60	4.7	1.98	1	June	17.2	81	26
143	O	Tenn. Gas Trans.	40	1.40	3.5	2.01	14	June	19.9	70	20
150	O	Texas East. Trans.	29	1.40	4.8	1.74	NC	Mar.	16.7	80	21
68	O	Texas Gas Trans.	25	1.00#	4.0	1.63	7	June	15.3	61	28
63	O	Transcont. Gas P. L. ..	34	1.40	4.1	2.11	8	June	16.1	66	21
		Averages			4.3%				16.5	72%	
		Integrated Companies									
122	S	American Nat. Gas	56	$2.20	3.9%	$3.41	1%	June	16.4	65%	33%
30	O	Colo. Interstate Gas	62	1.25	2.0	3.49	76	June	17.8	36	29
260	S	Columbia Gas System ...	16	.90	5.6	1.11	39	June	14.4	81	42
10	A	Consol. Gas Util.	14	.75	5.4	.96	D16	Apr.	14.6	78	59
213	S	Consol. Nat. Gas	34	1.50	4.4	2.72	13	June	12.5	55	64
144	S	El Paso Nat. Gas	46	2.00	4.3	2.28	D10	June	20.2	88	22
34	S	Equitable Gas	28	1.40	5.0	1.93	5	June	14.5	73	36
12	O	Kansas-Nebr. Nat. Gas ..	36	1.20	3.3	1.30	D24	Dec.	—	92	31
78	S	Lone Star Gas	31	1.40	4.5	1.98	19	June	15.7	71	42
22	S	Montana-Dakota Utils. ..	29	1.00	3.4	1.36	7	June	21.3	74	31
18	O	Mountain Fuel Supply ..	28	1.20	4.3	1.61	10	June	17.4	75	55
64	S	National Fuel Gas	22	1.00	4.5	1.58	15	June	13.9	63	58
89	S	Northern Nat. Gas	45	2.00	4.4	3.23	35	June	13.9	62	32
37	S	Oklahoma Nat. Gas	23	1.20	5.2	1.71	29	June	13.5	70	32
87	S	Panhandle East. P. L. ...	78	3.00#	3.8	4.63	NC	June	16.8	65	33
10	O	Pennsylvania Gas	29	1.00	3.4	1.79	126	Dec.	16.2	56	77
146	S	Peoples Gas Lt. & Coke .	159	7.00	4.4	10.48	D3	June	15.2	67	36
27	O	Southern Union Gas	24	1.00	4.2	1.33	39	Dec.	18.0	75	34
215	S	United Gas Corp.	32	1.50	4.7	1.94	D9	June	16.5	77	42
		Averages			4.2%				15.9	70%	
		Retail Distributors									
23	A	Alabama Gas	34	$1.28	3.8%	$1.90	7%	June	17.9	67%	43%
42	A	Ark.-Louisiana Gas	16	.50	3.1	.49	D27	Mar.	—	102	49
36	O	Atlanta Gas Light	27	1.20	4.4	2.20	23	Mar.	12.3	55	36
4	O	Bridgeport Gas Light ...	27	1.40	5.2	2.05	21	June	13.2	68	45
46	S	Brooklyn Union Gas	33	1.80	5.5	2.60	5	June	12.7	69	46
29	O	Central Elec. & Gas	17	.80	4.7	1.40	26	June	12.1	57	16
10	O	Central Indiana Gas	16	.80(b)	5.0	.99	60	June	16.2	81	62
51	O	Gas Service	28	1.36	4.9	1.83	5	June	15.3	74	39
6	O	Hartford Gas	40	2.00	5.0	2.97	NC	Feb.	13.5	67	52
14	O	Houston Nat. Gas	25	1.00	4.0	2.15	6	July '54	11.6	47	22
14	O	Indiana Gas & Water	18	.92	5.1	1.29	13	June	14.0	71	46
6	A	Kings Co. Lighting	15	.90	6.0	1.16	D5	June	12.9	78	27
38	S	Laclede Gas	14	.72	5.1	.96	17	June	14.6	75	37
31	O	Minneapolis Gas	27	1.25	4.6	1.63	16	June	16.6	77	40
13	O	Mississippi Valley Gas ..	20	1.00(d)	5.0	1.65	NC	May	12.1	61	29
8	O	Mobile Gas Service	21	.90	4.3	1.79	32	June	11.7	50	31
7	O	New Haven Gas	31	1.60	5.2	2.58	38	Dec.	12.0	62	64
9	O	New Jersey Nat. Gas ...	24	1.00E	4.2	1.76	35	June	13.6	57	26
62	O	North. Illinois Gas	22	.80	3.6	1.14	NC	June	19.3	70	48
183	S	Pacific Lighting	41	2.00	4.9	2.61	52	June	15.7	77	39
12	O	Pioneer Natural Gas	29	1.32	4.6	1.65	NC	Mar.	17.6	80	47
12	O	Portland Gas & Coke	29	.90	3.1	2.14	33	June	13.6	42	45
8	A	Providence Gas	10	.48	4.8	.52	27	Dec.	19.2	92	62
8	O	South Jersey Gas	25	1.20	4.8	1.62	17	Feb.	15.4	74	52
23	S	United Gas Improvement	38	2.00	5.3	2.09**	D5	June	18.2	96	63
33	S	Washington Gas Light ..	41	2.00	4.9	2.78	20	June	14.7	72	38
		Averages			4.6%				14.9	69%	

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER UTILITIES

1954 Rev. (Mill.)			8/24/55 Price About	Dividend Rate	Approx. Yield	Share Earnings* Current Period	Share Earnings* % Increase	Share Earnings* 12 Mos. Ended	Price-Earns. Ratio	Div. Payout	Approx. Com. Stock Equity
		Communications Companies									
		Bell System									
$4,784	S	Amer. T. & T. (Cons.) ..	178	$9.00	5.1%	$12.39**	6%	May	13.8	73%	65%
220	A	Bell Tel. of Canada	51	2.00	3.9	2.43	5	Dec.	21.0	82	62
37	O	Cin. & Sub. Bell Tel.	88	4.50	5.1	5.16	26	Dec.	17.1	87	100
163	A	Mountain Sts. T. & T. ..	142	6.60	4.6	8.20	17	May	17.3	80	73
259	A	New England T. & T.	138	8.00	5.8	7.78	D6	June	17.7	103	54
632	S	Pacific Tel. & Tel.	146	7.00	4.8	9.78	24	May	14.9	72	56
81	O	So. New England Tel.	43	2.00	4.7	2.18	8	Dec.	19.7	92	68
		Averages			4.9%				17.4	84%	
		Independents									
11	O	Calif. Water & Tel.	20	$1.00	5.0%	$1.60	11%	June	12.5	63%	36%
12	O	Central Telephone	21	.90	4.3	1.83	31	June	11.5	49	23
35	O	Continental Tel.	33	1.00	3.0	1.70	38	June	19.4	59	23
3	O	Florida Telephone	19	.80	4.2	1.07	40	Dec.	17.8	75	41
143	S	General Telephone	43	1.28	3.0	2.16	36	June	19.9	59	34
17	S	Peninsular Tel.	41	1.80	4.4	2.21	16	June	18.6	81	41
16	O	Rochester Tel.	21	1.00	4.8	1.50	28	June	14.0	67	31
24	O	United Utilities	23	1.20	5.2	1.60**	—	June	14.4	75	35
10	O	West Coast Telephone ...	20	1.00	5.0	1.27	D10	June	15.7	79	42
222	S	Western Union Tel.	23	1.00	4.3	1.89**	12	Dec.	12.2	53	80
		Averages			4.4%				15.7	69%	
		Transit Companies									
27	A	Capital Transit	10	$ .80	8.0%	$ .75	D23%	Mar.	13.3	107%	82%
13	O	Cincinnati Transit	5	.30	6.0	.13	D86	Dec.	—	231	41
9	O	Dallas Ry. & Terminal ..	14	1.40	10.0	2.21	21	Dec.	6.3	63	71
227	S	Greyhound Corp.	16	1.00	6.3	1.40	19	Mar.	11.4	71	82
25	O	Los Angeles Transit	16	1.00	6.3	.99	D21	Dec.	16.2	99	87
29	S	Nat'l. City Lines	23	1.40	6.1	2.76	17	Dec.	8.3	51	88
26	S	N. Y. C. Omnibus Corp. .	26	2.00	7.7	2.71E	NA	June	9.6	74	85
73	O	Phila. Transit	16	.30	1.9	Deficit	—	Dec.	—	—	24
7	O	Rochester Transit	4½	.40	8.9	.44	D23	Dec.	10.2	91	38
25	O	St. Louis P. S.	15	1.40	9.3	.79	D35	Dec.	19.0	177	90
		Averages			7.2%				11.8	111%	
		Water Companies									
		Holding Companies									
34	S	American Water Wks.	9¾	$ .50	5.3%	$ .87	D4%	Mar.	10.9	57%	16%
4	O	N. Y. Water Service	65	.80	1.2	1.96	40	June	—	41	32
		Operating Companies									
4	O	Bridgeport Hydraulic ..	31	$1.60	5.2%	$1.49	D5%	Dec.	20.8	107%	53%
11	O	Calif. Water Service	43	2.20	5.1	2.47	D3	June	17.4	89	29
2	O	Elizabethtown Water	135	5.00	3.7	6.34	D5	Dec.	21.3	79	—
8	S	Hackensack Water	44	2.00	4.5	3.26	D8	Dec.	13.5	61	41
5	O	Jamaica Water Supply ...	40	1.80	4.5	2.94	9	June	13.6	61	22
4	O	New Haven Water	59	3.00	5.1	4.42	76	Dec.	13.3	68	58
1	O	Ohio Water Service	27	1.50	5.6	1.78	D8	June	15.2	84	42
6	O	Phila. & Sub. Water	34	1.00(c)	2.9	2.45	—	Dec.	13.9	41	22
2	O	Plainfield Union Wt. ...	59	3.00	5.1	4.00	8	Dec.	14.8	75	—
9	O	Scranton-Springbrook ...	19	.90	4.7	1.30	D4	Mar.	14.6	69	31
3	O	West Va. Water Serv. ..	32	1.40	4.4	1.31**	D12	June	—	107	17
		Averages			4.6%				15.7	74%	

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *Earnings are calculated on present number of shares outstanding, except as otherwise indicated. **On average shares. #—A 2 per cent stock dividend was also paid December 31, 1954, and in previous year. (a)—Paid 4 per cent stock dividend. (b)—Paid 10 per cent stock dividend. (c)—Paid 5 per cent stock dividend. (d)—Paid 25 per cent stock dividend. NC—Not comparable. E—Estimated. NA—Not available.



What Others Think

Cost of Fringe Benefits to Electric Companies

On each gallon of gasoline that powered a car along the roads in 1953, two cents went into fringe benefits, as they are called, of the oil industry. Of each $10 paid on a pair of shoes the same year, $1 went for the fringe benefits paid to workers in the shoe industry. Five dollars on each $55 paid toward a suit of clothes was part of the price because of fringe benefit payments in the clothing industry. The same pattern, in the automobile industry, cost the car buyer $200 out of the $2,675 paid for one new model. After citing such figures, Franklin O. Rouse, director of the employee relations staff of Commonwealth Services, Inc., provided his audience—those attending the recent Joint Industrial Relations Conference of the industrial relations committee, EEI, and the personnel administration section of the Southeastern Electric Exchange at Cincinnati, Ohio—with similar statistics for the privately owned electric industry. Mr. Rouse's speech was instructive for its factual content, and as such, it was a provocative analysis of the amazingly important rôle such benefits have assumed in determining the over-all company and national economic outlook.

He said:

As customers of tax-paying, privately owned electric companies, approximately 25 cents of each $5 electric bill we paid that year went into the fringe benefit plans of our power companies. That averages over $3 a year from each residential customer.

Yes, fringe benefits cost money. Today, these things cost the American consumer about $275 each year for every man, woman, and child in the country.

In these matters, such plans, as they affect the utility industry, are among the most elaborate and most costly of all. Utilities, broadly grouped, were in third place in 1953 in terms of the size of their fringe benefit bills for each employee. Such costs equaled 40.3 cents per hour or an annual figure of $845 per employee. On the classifications of pensions and insurance coverage, and on paid vacations, holidays, and sick leave, utilities were in second place, costwise.

The employee relations staff director translated the trend toward increasing fringe benefits to costs in the belief that many companies are not yet fully aware of the size of these costs. One interesting fact throughout industry in general, he found, is that since 1947, fringes have been rising faster than direct payroll

costs. In 1947 fringes were 15 per cent of payroll. In 1953 they were 20 per cent. In that 6-year period they rose one-third faster than payrolls. Much of this rise has gone unnoticed, Mr. Rouse added, perhaps because more than half of the fringe outlay does not show up in official government statistics. Hidden labor costs, for example those benefits that are not paid directly to the worker, are not reported as "earnings" in the various wage and salary surveys available today.

ACCORDING to a recent U. S. Chamber of Commerce survey,

> In 1947, fringe benefits averaged 21 cents per hour. In those same companies in 1949, 26 cents; in 1951, 33 cents; in 1953, 38 cents. The average fringe payment of all the companies included in the survey, and it covered a fairly representative cross section of industry, was 35 cents an hour per employee. Of that figure, 15 cents went into the pay envelope as payments for time not worked, such as vacations, holidays, sickness, travel, excused time, and the like. Such hidden costs as payments for pensions, insurance, social security, and similar items, took the other 20 cents.

Based on that survey, the annual cost of the nation's fringe benefit package was placed at $32 billion for the year 1953. The total was distributed about as follows:

> Five and one-half billion dollars for legally required payments such as social security, unemployment insurance, and workmen's compensation;
>
> Six and one-half billion dollars for "agreed-upon" pension and insurance programs;
>
> Six billion dollars for paid rest, lunch, and wash-up time;
>
> Twelve billion dollars for vacations, holidays, and sick leave; and
>
> Two billion dollars as bonuses and profit-sharing payments.

IF these costs are projected into the future, the fringe benefit package twenty-five years from now, Mr. Rouse estimated, will be $120 billion a year, or approximately one-third of the nation's total of wages and salaries at that time. In terms of the electric utility industry, the EEI Industrial Relations Committee survey of the cost of fringes in 1953 reported a figure of almost 23 per cent of payroll as the total cost of the fringe package. This puts the cost, for investor-owned class A and B electric utilities, at close to $260,000,000 for that year. As the speaker split that figure up into subtotals, about $100,000,000 went for payments of time not worked in the form of vacations, holidays, and other excused and paid-for absences. Pension costs amounted to $96,700,000, and group insurance costs at about $18,900,000. The balance of the package, some $37,800,000, was used to provide the cost of legally required fringe payments and to pay the cost of the long and growing list of "other" extras.

Continuing his statistical survey, Mr. Rouse remarked that the figures show an increase in costs from about 16 per cent of payroll in 1946 to 22.46 per cent of a higher base payroll in 1953. This would place the increase at about $159,000,000, a 160 per cent increase in the cost of the fringe. And it is going up, Mr. Rouse pointed out. The industrial relations committee survey for 1954 shows it to be 22.71 per cent of payroll. This means, the speaker suggested, that the fringe has become something of a surcharge on the cost of doing business. He added:

> When something called a pension plan, or group life insurance, or extra holidays, costs a company a few thou-

sand dollars—$10,000-$100,000— or a quarter of a million dollars, annually, that is just not a fringe item in the operation of a public utility. It may not even be proper to call it a surcharge on the cost of doing business.

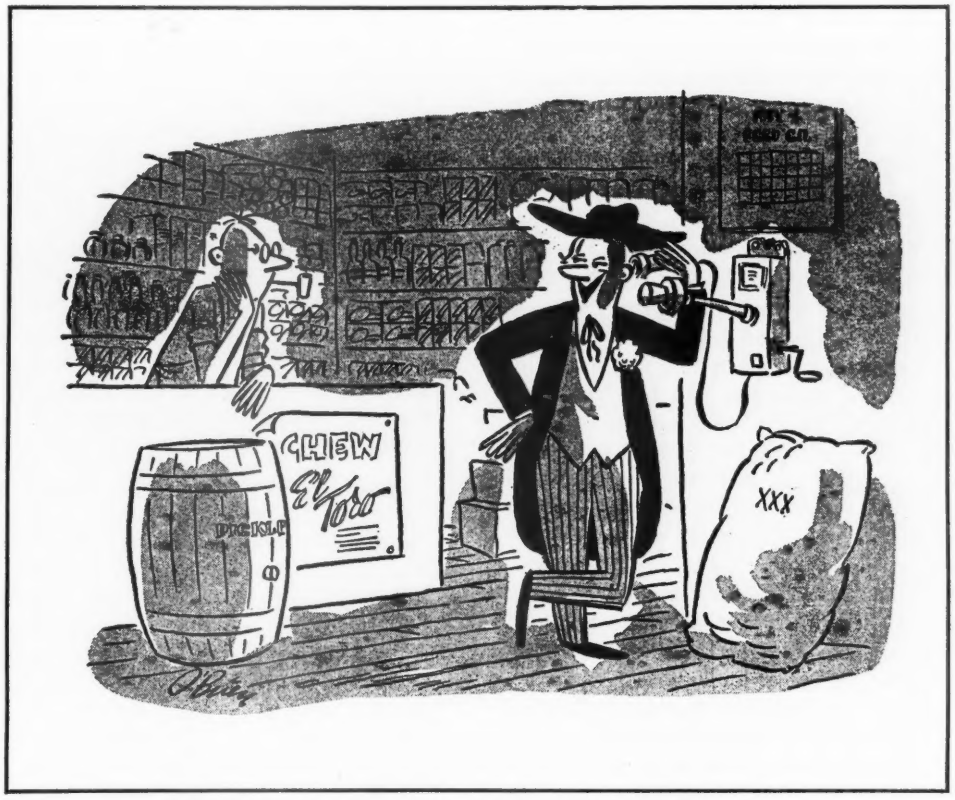
MR. ROUSE did not disparage either the value or importance of such benefits to the employee. But he maintained that they should be fitted carefully into the company scheme of operations. He stated:

> . . . The facts of business life today—pensions, insurance, overtime pay, controlled sick leaves, vacations, and closely related provisions—the surcharges—are necessary, expected, and accepted appendages in the cost of operating a business. But if we are going to run a business today in line with the recognized best practices of efficiency, exercising prudence, and with the general welfare of all concerned—the stockholders, the customers, the employees, and the public—clearly in mind, then I think even these accepted programs need close scrutiny and administration not to mention the giving of close analysis to the costs entailed, and the benefits derived, in some of the more borderline fringe plans—the fringes on top of the surcharge. Generally speaking, I believe most of these surcharges add something to the employee's welfare and that they, in turn, reflect to some extent on the success of the company's business.

In ten companies, all members of the Southeastern Electric Exchange, the cost of employees' welfare expenses and of pensions, in electric operations (as reported by the Federal Power Commission) increased 807 per cent between 1943 and 1953, the speaker declared. In 1943 this cost was slightly in excess of $1,000,000. In 1953 the cost was reported to be almost $10,000,000. Allowing for the effect of growth and inflation in this increase, Mr. Rouse still found the dollar amount and the percentage increase impressive. He compared these figures with total electric operating expenses, which increased $163,959,000 or 237 per cent. Five per cent, or $8,690,000, of the increase in electric operating expenses of the ten companies over the period was due to the increased cost of employees' welfare expenses and of pensions. During the same period, as revenue from the sale of electricity by these companies increased 172 per cent, 3 per cent, in 1953, went to pay for the increase in the cost of employees' welfare expenses and of pensions.

TIME paid for but not worked, such as vacations, holidays, coffee breaks, paid-lunch periods, jury duty, voting, etc., represents the largest category, costwise, in this benefit package, according to the employee relations staff director. He stated that the utility industry contributes especially heavily to pension plans and a lesser amount to insurance arrangements and added:

> . . . In general, throughout industry, the cost [of insurance coverage] is paid for by joint employer-employee contributions in over half of the plans. Employers pay the entire cost in something under 40 per cent of the plans, and employees pay all in about 10 per cent of the companies. These figures are also representative of the utility industry with the exception that the percentage of employers paying the entire cost is lower among utilities.
>
> On pension plans alone, throughout general industry, according to a Bureau of Labor Statistics study, 84.7 per cent of employees with pension coverage are under noncontributory plans. In the



"YOU HAVE NO IDEA HOW MUCH I SAVE CAMPAIGNING BY PARTY LINE!"

utility industry, evidence indicates that the percentage of noncontributory coverage is probably much higher.

Group life plans were not included in the above analysis because the extent and nature of employee participation in the cost is such a variable factor. For example, some companies pay the entire cost on the first $1,000, $1,500, or some other basic amount, and they may, on additional coverage, bear some portion of that expense. For these reasons, it is difficult to arrive at a clear picture of these practices or of the costs.

When the cost of fringe benefits, broadly used, approximates 25 per cent of payroll in the electric industry, and the speaker suggested that is a conservative estimate, there are grounds for examining what is taking place. Mr. Rouse broke this figure down as follows: 10 to 13 per cent represents payments included in the normal pay check for holidays, vacations, and so on, and 13 to 15 per cent goes as "hidden" payments made by the company for the benefit of the employee —pensions, insurance, social security, and the like. Should there, then, be changes in the way the companies account for such benefits?

On this point, Mr. Rouse then stated:

> In accounting for these funds, the procedure normally followed on payments for time not worked is to charge these costs to the operating expense account normally benefited by the employees' services. Some companies are carrying a proportionate part of this unworked time into construction.
>
> On the other classification of benefits, payments not included in the pay check, the provisions of the regulatory classifications of accounts require the major part of these costs to be charged to general and administrative expenses. That was all right when we were talking about one-fourth or one-half per cent of payroll. But payments on the magnitude of 13 to 15 per cent of today's payroll are surely no longer overhead expenses, they are labor costs, whether we call them indirect or not, and they should be identified and segregated as such under the appropriate functional account. In this way a company could be assured of proper capitalization of these amounts in construction costs. However, to do this some modication of the present regulatory classifications may be required. And very likely it will come, as the size of these items becomes better known.

THE largest single item in the electric industry fringe benefit burden Mr. Rouse considered to be the pension plan. While 96 per cent of the present plans have only been established since 1941, their costs have been "enormous," the speaker declared, and there seems to be no ceiling in sight.

Over the years, the original minimum pension of $60, including social security, has been upped, at a cost, to $100 or more. It is now conceded, Mr. Rouse maintained, that, due to inflation, some current pensions are not adequate whether social security is included or not. Some companies are having to seek ways to increase pension provisions up and down the line. Meanwhile, unions are demanding more—up to a $200 minimum in some cases, according to Mr. Rouse. One way the unions suggest to increase the level of pension benefits was to change the base for computing past service from one per cent of 1943 earnings to one per cent of 1955 earnings.

THE speaker felt that this might impose unreasonable demands on the company:

> Let's see what that would mean to a company, costwise. Let's work it out on a male employee who earned $2,500 in 1943 after twenty years of past service but who today, at age fifty-five, is earning $5,000 on the same job. The calculations show that additional dollars will have to be set aside to provide annual benefits for past service of $1,000 as compared to $500 under the old base. In order to provide this additional $500 a year in benefits when our employee reaches age sixty-five, ten years from now, the actuaries tell us that we should have about $6,280 in trust at that time. The actuaries then make certain sound assumptions and tell us that by laying aside about $4,030 today there will be enough money in trust in ten years, including interest earned, to pay our man the additional $500 a year through his life expectancy. If you are short of ready cash at the moment and cannot pay the full cost all at once, and for tax and other reasons you normally would not pay it this way, the actuaries will work out the details of an instalment plan so that the $6,280 will be available when needed. Can your company stand that kind of financial ex-

pense for this employee; for ten employees; for one hundred; for a thousand employees?

THEORIES on how to meet pension costs differ, but Mr. Rouse noted a trend toward the adoption of the trusteed plan or by amending present plans to the trusteed type and then authorizing investments in common stock. Ninety per cent of all pension plans were of the insured type in 1938 but only 62 per cent were of that nature in 1952. Of approximately $22 billion in pension funds today, roughly one-half billion is invested in stocks. The speaker pointed out that there is a difference of opinion on whether such investments are wise ones, in certain cases. He said:

> Some people say that money from trusteed funds, wisely invested in common stocks, can get at least two percentage points higher earnings than can insured plans which are substantially limited to fixed interest investments. These people expect earnings considerably over 4 per cent on the money invested in common stocks *versus* a lower percentage of earnings realized on insured funds invested in bonds and other low risk securities. On the other hand, insurance companies are saying that many companies, especially smaller ones, are being sold a bill of goods by the banks and the trust companies. They warn of the dangers of investing retirement funds outside of the list of those securities approved for insurance company investments.

What is happening on costs in some of the other welfare plans, such as the various forms of insurance protection? Some costs are going up, but in other cases, Mr. Rouse pointed out, the dollar may be buying more. As insurance companies gain experience on the dollar turnover under their policies, they are offering broadened and improved coverages, frequently for the same money they collected the year before. In this respect, some companies have extended total disability benefits from fifty-two weeks to 104 weeks' coverage, increased the amounts under dismemberment benefits, provided blanket medical expense up to 50 per cent, and in other ways liberalized their policies, all without additional dollar cost to the policyholder.

ON the other hand, some insurance costs are increasing. Hospital room and board have climbed from $5 a day to $12, or more. Further added costs, which insurance rates must be set to reflect, have come from increasing coverage to cover dependents of employees and by providing more medical and hospital benefits. And, as usual, the speaker declared, "we can anticipate that the employer will have to pick up a major part of the tab."

Mr. Rouse continued:

> No consideration of the cost of benefit plans would be complete without calling attention to costs in the federal government's social security programs. While Congress intended to maintain old-age and survivors insurance, for example, on a self-supporting basis, it has, in fact, recognized that the rates are inadequate. The tax base has gone from $3,000 in 1935 to $4,200 in 1954, and benefits have been liberalized. These conditions have raised the prospective ultimate rate to 4 per cent of payroll for both the employer and the employee. Because of the low initial costs, present recipients and their former employers have paid but 4 per cent of the cost of the benefits now going to the recipient. The other 96 per cent of the cost has been met out of the tax contributions

of those still working. When for the payment of as little as $85 in payroll taxes a person can qualify for an OASI benefit, for which an insurance company would have to collect on the order of $24,000, it is quite obvious that someone is going to have to make up the difference. How? By paying higher taxes.

In the personnel practices and procedures of utility companies, more than one hundred items may legitimately be called fringe benefits, the speaker felt. There is, however, "real question about some of them being benefits." He believed that both company and union officials would do well to think twice before extending some of them, and he listed some questions that might well be asked:

> Where does the money come from? How will the surcharge and the growing fringe be paid for tomorrow? Are these recondite expenses becoming of such size now that they should be given more emphasis in rate hearings? Can we effect savings through improved business practices? And what about increased productivity? Are we going to permit one group to take up all of the gain to be had from this source? In the final analysis increased productivity will be the main support for increased wage and benefit supplements. But we must make sure that the consumer, the stockholder, and other employees get their fair share of the potential benefits to be had from this source. It is possible that the cost of granting more time off with pay and the desire to purchase more protection from the risks of life can consume all of labor's share of the economy's increased productivity during the next ten years.

As the cost of fringe benefits mounts skyward, company officials, the speaker suggested, should be sure that employees, the union leaders, and the public know how much these things mean to employee income and to the cost of doing business. Mr. Rouse concluded his remarks on a note of caution, saying that as companies face these costs and try to find ways of meeting them, they might remember that in a recent survey of over one-half million workers, 73 per cent of these people reported that they were presently satisfied with their current fringe benefits.

Wage Increases *versus* "Lagging" Productivity

Wage and "fringe benefit" increases in 1955 substantially exceed the increases in general productivity, according to the August number of *Economic Intelligence,* published by the economic research department of the U. S. Chamber of Commerce. It is for this reason, the publication states, that a new inflationary wage-price spiral is widely anticipated.

To substantiate this view, the article, entitled "Wage Inflation?", cited the costly settlements made by Ford and General Motors in early June, settlements that steel industrialists pointed out would mean steel price increases in so far as the wage increases were above and beyond productivity improvements.

The article continues:

> As a rough formula, every one-cent wage increase in the steel industry means a 40-cent to 50-cent increase in the price of a ton of steel—allowing for the steel company's direct increased

wage costs and similar increases of cost among their suppliers and distributors. The labor leaders argued that their demands could be met "out of profits"—a refrain heard every year when negotiations are pending. Annual net corporation profits for the whole economy averaged $19 billion in 1948-49 and about $18 billion since 1950. But compensation of employees jumped from an average of $141 billion in 1948-49 to about $215 billion annual rate currently, or nearly $75 billion increase. The view that wages are based on "ability to pay" and that wage increases come out of profits dies very hard!

Do Prices Follow Wages?

Promptly after the steel strike in July, which cost an estimated $20,000,000—in closing down furnaces, cooling them off, etc.—steel prices were increased about $7.35 per ton. Steel going into thousands of products will now cost more. Next year the automobile is likely to be $50 to $150 higher.

The size, the drama, and the potential repercussions of a Ford or GM strike concentrated much attention on their 20-cent-22-cent per hour settlement in the face of Reuther's threat to close down the plants. Prior to these settlements, it was generally assumed that steel might settle for an increase of 10 cents per hour, but at that figure a strike started. The auto settlements, while large this year, will average about 11 cents per hour over the three-year contract.

Do these developments, plus other settlements, signal another inflationary period, based on a substantial wage-price spiral? The writer suggests that the answer depends partly on semantics. Properly stated, a mere price level increase is not inflation. But it may be the symptom of inflation. According to the article, inflation is an increase in the money supply or, more properly, money spending relative to the supply of goods. In the long run, but not in the short run, prices follow costs fairly closely. Just because costs rise, there is no assurance that prices can or will rise. In fact, there is no clear-cut evidence to indicate that price changes in the short run are geared closely to cost changes, even though that is the case in the long run.

For these reasons, the writer states, it would be unduly rash to predict that the large wage increases of 1955 will mean substantially higher prices in the year ahead. The overpricing of labor may instead translate itself into unemployment—not higher prices. But this is not the whole story.

As the writer points out:

> . . . The two major political parties are committed to governmental policies—primarily monetary and fiscal—which are deemed to pave the way for so-called *full employment* and *eternal prosperity*. But the administration is also committed to the principle of the "sound dollar." The recent mammoth wage increases will put these two divergent policies under severe test in the year ahead. The wage increases, particularly if followed in other industries by equally large settlements and forcing price increases, may well encounter consumer resistance among the buyers whose incomes are either fixed or less responsive on the up side. Markets may threaten to suffer in housing, automobiles, and other goods.

This loose monetary and fiscal policy may put prices under upward pressure via strong market demand and not primarily via cost increases.

The March of Events

Clark Hill Accord Reached

THE Interior Department on August 29th disclosed that a preliminary arrangement under which the federal government itself would sell power from its Clark Hill dam to rural electric co-operatives in the state of Georgia had been agreed upon.

The hydroelectric plant, with a capacity of 280,000 kilowatts, is on the Savannah river between Georgia and South Carolina. Georgia co-ops have been trying for years to buy part of Clark Hill's power directly from the government, rather than have the Georgia Power Company serve as a middleman.

This case has been watched nationally because of the possibility that a final decision would serve as a precedent in administering the "preferred customers" clause in federal power legislation. The co-operatives have insisted that in such situations the government must sell its power directly to public bodies, including co-ops, if they want to buy it.

Last year the co-operatives rejected an Interior Department plan to sell the power to the Georgia Company, which then would have resold it to "preference" customers. This would have meant the co-ops would become customers of the private utility. They did not want this, even at government-guaranteed prices.

In Atlanta, Harllee Branch, Jr., president of Georgia Power, said it would go along with the agreement as "another concession . . . in an effort to end the long-continued controversy." He said the plan rejected by the co-operatives would have delivered power more cheaply and efficiently.

District of Columbia

Commission Has "Nibbles"

A COMMISSIONER for the District of Columbia Public Utilities Commission said that they had received "five or six bona fide nibbles" from companies interested in running a transit service for the nation's capital.

The commission invited proposals for an all-bus transit service to replace the Capital Transit Company next year. Commissioner Robert M. Weston disclosed late last month that the District of Columbia commission has heard from five or six companies. He said the names of the

companies will be "kept confidential" until October 10th, the deadline for receiving applications to run bus service in Washington and its suburbs.

In the midst of a 52-day transit strike (which ended August 22nd) Congress passed a law giving authority over the company to the District of Columbia commissioners, and ending the franchise of Capital Transit as of August 14, 1956.

In seeking a new firm to operate the buses, the public utilities commission sent out invitations to 200-member companies of the American Transit Association. The commission stated "Applicants must be prepared to furnish all of the property, facilities, equipment, and services that will be required to provide the mass transit service." It said, "There is no requirement to purchase any part of the property, facilities, or equipment of the Capital Transit Company."

Georgia

Company to Retain Florida Tie-in

THE Securities and Exchange Commission recently rejected a petition by the Georgia Public Service Commission to separate the Georgia Power & Light Company from its parent, Florida Power Corporation.

The state commission filed a plea June 8th to divest Florida Power Corporation of its Georgia Power & Light subsidiary.

Georgia Power & Light Company serves communities in 18 counties stretching across south Georgia from Jakin, near the Alabama border, to the Atlantic ocean.

The commission had contended that residential rates in the area are 30 per cent higher and industrial rates were "substantially higher" than comparable rates in adjacent territory served by Georgia Power Company.

Michigan

Gas Rate Boost Authorized

THE state public service commission recently authorized a rate increase totaling $4,400,000 a year for the Michigan Consolidated Gas Company, effective August 22nd. The boost will average 66 cents per month for Detroit district customers and 38 cents per month for outstate customers. About 640,000 of the utility's 771,000 customers are in the Detroit district.

Michigan Consolidated had asked for a $10,400,000 rate increase. Half of the increase granted will be consumed, the commission said, by additional federal income taxes. Commission Chairman McCarthy said the agency granted the rate increase only after an audit of the company's records revealed that earnings had dipped below the level required to "continue adequate service" to its own customers.

"The present increase," he said, "does no more than restore the company to the same earnings position which prevailed in 1952."

McCarthy explained the increases were necessary to pay higher costs of wages and taxes, higher pipeline rates for gas, and other increased operating expenses.

The commission had earlier ordered a September 1st hearing to determine the method of refunding about $3,500,000 due to pipeline rate adjustments. The commission said an additional $4,000,000 would probably be refunded in the next few months.

Pennsylvania

Flood Relief Contribution Authorized

THE board of directors of the Pennsylvania Power & Light Company last month authorized a contribution of $50,000 to Red Cross chapters in its service area for flood relief. The announcement was made by Charles E. Oakes, president and director of the company, following the monthly meeting of the board in the general office in Allentown.

The resolution as approved by the utility's directors stated that the money was to be used "in giving aid to persons in this company's service area who are in need of assistance as the result of the flood."

Tennessee

Engineering Firm Selected

SELECTION of the New York engineering firm of Burns & Roe, Inc., to make preliminary studies leading to selection of a site and construction of a new $100,000,000 power plant by the city of Memphis was announced last month by Major Thomas H. Allen, president of the Memphis Light, Gas, and Water Commission.

"We cannot at present tell the exact time required to make the study and recommendations, but it should not take more than a few months," Major Allen said. "We think we should go into actual construction of the plant by next January 1st." He said it was practically certain the plant would be in Shelby county. "The plant would be established outside Shelby county only if it is found impossible to locate a reasonably economic site in Shelby," he added.

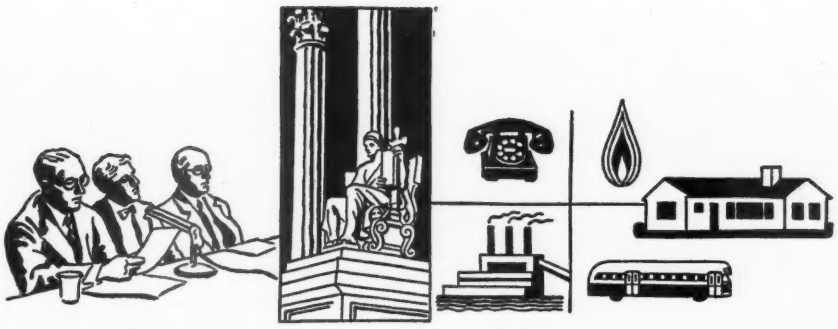
Washington

Vote to Decide Power Issue

VOTERS of Stevens county will decide whether the Washington Water Power Company will acquire the properties of the county's public utility district No. 1 or whether the public utility district shall acquire the properties of the power company. That was the basis of an agreement announced jointly last month by the president of the PUD and counsel for Washington Water Power. The agreement came after months of negotiations.

The agreement provides that the district shall advertise its properties for sale. Bids are to be received on September 26th. It provides that the company will bid an amount not less than enough to call and pay all bonds and indebtedness of the district and leave it a cash balance of $200,000. It was estimated that this bid would amount to approximately $2,750,000. The district then agrees that it will submit such bid to the voters for their approval and a special election will be held as soon as practicable after September 26th, which would be some time in the month of November.

If three-fifths of the voters approve the sale, the district's properties will be at once transferred to the Washington Water Power Company. If three-fifths of the voters do not approve, then it is agreed that a decree will be entered by the superior court whereby the district will acquire the Washington Water Power Company's properties for the sum of $3,100,000.



Progress of Regulation

Regulatory Trends

HURRICANES "Connie" and "Diane," headlined throughout the country, not only created "disaster areas," but brought into the limelight regulatory problems which commissions and utilities will probably have to tackle. Telephone and electric lines were down. Water supplies were polluted. Utility companies struggled valiantly to restore service. What about the tremendous cost? How will rates be affected?

Storm Damage Cost

That the public must pay for losses suffered through destruction of property by extraordinary casualties was recognized long ago, as in a decision by the Montana commission involving rates of the Mountain States Telephone & Telegraph Company (PUR1924C 545). How this cost is to be reflected by charges to operating expense and to depreciation reserves has been considered by several commissions. Amortization of such expense was approved in reported decisions in Arizona (PUR1915C 525), California (PUR1922B 336), Illinois (PUR1920D 332), New Jersey (1 PUR3d 191), and Pennsylvania (99 PUR NS 161).

But the South Dakota commission ruled that such expense was properly chargeable against the depreciation reserve, and should therefore be eliminated from a statement of operating expenses (PUR1919A 650). A provision by a telephone utility to meet sleet storm damages out of an annual depreciation reserve was held by the Indiana commission to be a proper use of such fund (PUR1930B 336). As stated by the Arizona commission, the reserve for depreciation must provide against extraordinary casualties, such as fire, flood, and storm (PUR1920B 411). The Indiana commission said that the cost of renewals and expenditures occasioned by sleet storm damage should be charged to depreciation, and not to maintenance, and therefore could not be

considered as operating expenses for rate making (PUR1919C 209). Unusual operating hazards of a telephone company in the nature of a sleet storm fund, it was said in one Pennsylvania case, may properly be provided for currently out of income and the importance of the same should be given consideration in fixing an allowance for the annual depreciation (PUR1931A 169).

In fixing the depreciation allowance of a telephone system, consideration was given by the West Virginia commission to the fact that premiums had been paid for insurance against future losses from extraordinary casualties (PUR1926D 209). Also in Illinois an electric utility was not allowed revenues to provide a surplus as protection against future extraordinary casualties, such as tornadoes and floods, where such losses might be guarded against by insurance. It appeared that the utility was already paying into a fund of the parent company an annual percentage supposed to cover casualties of dependent companies, that such casualties had been met by emergency expenditures distributed in operating accounts, and that recurrence of casualties was only remotely possible (PUR1916B 24).

Flood and Wind Damage Possibilities

Recent storm experience and predictions may further upset data used in rate cases in past years. Last year the New Jersey commission had occasion to analyze such evidence in a rate proceeding (1 PUR3d 191). The New Jersey Power & Light Company had experienced severe storms in 1948, 1950, and 1953. Reference was made to testimony of an expert meteorologist in an earlier case (91 PUR NS 331) based on data covering the period 1888 to 1948.

He had concluded that storms similar to the 1948 storm would recur on an average of once in every seven and one-half years. Since January, 1948, however, two other storms of equal or greater severity had occurred. The commission, in view of all the evidence, normalized the cost on a 5-year basis. The same commission, in 1949 (78 PUR NS 97) and in 1952 (99 PUR NS 393), allowed for storm damage expense of the New Jersey Telephone Company on the basis of a 5-year frequency, instead of two and one-half years as claimed by the company.

The Massachusetts commission disapproved a maintenance charge by New England Telephone & Telegraph Company for hurricane damage in 1954 which, according to the company, decreased earnings for the year by $1,648,000 (7 PUR3d 580). The commission refused to assume that such storms as were experienced last year were necessarily going to be repeated on an average of every five years. There was no request for amortization, but the request was for additional net income "for an indefinite period in the future."

The retirement expense of a Maryland electric utility in a year when the company had replaced a large number of poles and wires because of severe storm damage and had done protective work in anticipation of future storm damage was not a fair criterion for the future (7 PUR NS 135).

Duty to Reconstruct and Render Service

Ordinarily utilities go about the job of putting their facilities back in shape as a matter of course, but in some cases special facts may present the question whether reconstruction should be required and service resumed. Such was the case of the Union Telephone Company (PUR1923C 767), where the Michigan commission held that it had no power to require the company to expend money in the reconstruction of telephone lines destroyed by storm when the rates for service would be inadequate to pay the cost. It was said that a telephone company should not be required, at the expense of its patrons as a whole, to reconstruct rural lines destroyed by storm unless persons interested in such reconstruction make satisfactory arrangements to compensate the company for such service. But the commission said that the former patrons should be permitted to organize a new company when the telephone company had neglected, failed, and refused to rebuild its lines and facilities.

An application to compel the reconstruction of a toll line practically destroyed by a sleet storm was refused by the Illinois commission where it appeared that adequate service could be furnished by a toll line of another company between the same points (PUR1918F 97).

In Missouri it was concluded that increased telephone rates should not be authorized in the case of a company which intended to sell the property, and whose lines had been put out of service by a sleet storm, until service had been restored or until the commission had received assurance that parties proposing to purchase the stock of the company were willing and able to restore service (PUR1925D 477).

Review of Current Cases

Attrition Considered in Fixing Telephone Rates Related to Average Investment

THE Michigan commission rejected for a second time a request by the Michigan Bell Telephone Company for a $28,000,000 rate increase, but it approved an increase of $2,802,000. In its original order (5 PUR3d 301), the commission had found that net earnings in the test period adopted exceeded 6.5 per cent. Under the new rates approved, using any of the various theories of rate making advanced, the return would amount to 6.22 per cent or better. The commission held that earnings which would produce a return of between 6.43 per cent on average plant and 6.95 per cent on average capital were well within the "regulatory zone of reasonableness."

The company claimed that the commission erred in not giving effect to current cost of plant, as opposed to historical cost or actual investment, as well as in its treatment of depreciation, taxes, customer deposits, and charitable contributions. The commission pointed out, however, that rate making is not an exact science and the determination of what constitutes a fair charge calls in a great degree for the exercise of judgment. Courts have recog-

nized in many cases that no matter what formula or method may be used, it is the result which matters, and any method which appears to be based on fact and which is not arbitrary is valid if the result is fair in the light of experience.

Rate Base

The commission considered end-of-period rate base figures only for purposes of comparison. It said that such treatment should not be considered in any way as a departure from its prior rulings. It felt that revenues for a 12-month period more properly relate to plant in existence and devoted to service over the entire 12-month period. Consequently, it adhered to its practice of giving greatest weight to annual averages. The commission pointed out that end-of-period figures related to rate bases have one inherent fault: They in reality have significance only when measured against a revenue figure for that particular instant.

This, it held would be impracticable to compute.

Rate Adjustments Recognize Attrition

When an adjustment of rates becomes necessary, it should have as one of its purposes the establishment of schedules designed to remove, so far as possible, such inequalities and inequities as may exist. The commission observed that in previous opinions it has discussed attrition of the rate of return caused by the addition of plant that produces no revenue as well as attrition caused by the replacement of low-priced plant with higher-priced plant with no greater service capacity. In such cases allowance has been made for "slippage" of the rate of return.

In addition to the causes of attrition of the rate of return mentioned, a rate schedule design may also be a factor. If the rates paid by party-line customers regrading to individual-line service do not provide the same proportionate income when related to the increased investment as was produced by the party-line rate related to the lower investment, the over-all rate of return would decline. Studies indicate that this effect has resulted from the "upgrading" of thousands of party-line customers to individual-line services during the past few years. The commission believed that increases in the individual-line residence flat rate service rates of 15 cents to 50 cents a month throughout the company's service areas would tend to offset this attrition as well as produce from existing individual-line residence customers the revenues needed for a reasonable return. *Re Michigan Bell Teleph. Co. T-252-55.15, July 28, 1955.*

Higher Taxes Basis for Telephone Rate Increase

THE Maine commission authorized the New England Telephone & Telegraph Company to increase rates to yield a return of 6 per cent on net investment, assuming economies of operation and no unforeseen contingencies. The company's principal witness said that, "barring such contingencies, if the rates were allowed it would be a matter of some time before any further increase would be sought." The company had been granted a general rate increase after extended proceedings in February, 1953. In the instant proceeding the company limited itself to evidence from its books of revenues, expenses, and actual investment. No evidence was presented as to current values of properties, and the company attempted to "avoid any fundamentally controversial areas."

The need for rate relief was based upon three principal grounds: a growth in net investment since the last test period, increased wages, and the imposition of a higher state tax. The company introduced an exhibit showing its present earnings position, indicating earnings on net investment of 5.1 per cent for the 12-month period ending April 30, 1955. This exhibit showed an earnings trend from the year of the last decree, 1953, as ranging from 5.99 per cent to 5.10 per cent. For the first four months of 1955, the company's earnings had declined to about 4½ per cent.

Evidence showed that an increase in state taxes imposed by the recent session of the legislature raised expenses by about $310,000, thus precipitating the filing for new rates. The commission said that under Maine statutes, in the case of such an increase in expenses, it "has no alternative but to consider this as a legitimate expense to be recovered in rates paid by the public." *Re New England Teleph. & Teleg. Co. F. C. No. 1472, July 13, 1955.*

Housing Project Entitled to Combined Meter Reading

THE United States district court awarded a judgment to a housing project in an action to recover overpayments for electricity. A municipal electric plant had refused to charge for service on the basis of a sliding scale of rates applicable to professional, mercantile, industrial, and other establishments not classified as single family residences.

The court held that a housing project was an "establishment" within the meaning of the tariff. The practice of the city in refusing to treat the project as one single customer and to make a combined meter reading for the entire project was in conflict with the existing rate schedule. *Richardson Vista Corp. et al. v. City of Anchorage, 131 F Supp 404.*

Stock Dividend Equal to Surplus Authorized to Protect Equity against Public Offering at Par

A TELEPHONE company, whose entire common capital stock was owned by the president of the company, was granted authority by the North Carolina commission to declare an $800,000 common stock dividend before exercising a further grant of authority to issue $1,000,000 of additional common for sale to the public. The proceeds of the public offering were to be used to purchase certain buildings then owned by the company president, to retire outstanding preferred stock, and to finance additions to plant.

The balance sheet, presented with the application, showed an accumulated earned surplus of slightly more than $800,000. As the company thought it expedient to offer the public issue at about par, which was considerably less than book value, it became necessary to reduce the book value in order to safeguard the stockholder's equity. Authority was requested, therefore, to issue a stock dividend to the sole stockholder in substantially the amount of the surplus.

The commission approved this request, pointing out that the earned surplus belonged to the common stockholder, and if a transfer of ownership to the public was contemplated, his equity may be protected either by an appropriate reduction in the book value of the stock or by selling the

new common at a price approximating the existing book value.

After considering the application and making a separate investigation on its own motion, the commission found the proposed stock issues appropriate to the needs of the company and compatible with the public interest, and accordingly gave its approval to the program. *Re Lee Teleph. Co. Docket P-29, Sub 7, July 25, 1955.*

FPC Allows Conversion of Little Inch Pipeline for Oil after Replacement by New Gas Line

THE Federal Power Commission, under the provisions of the Natural Gas Act, has authorized the Texas Eastern Transmission Corporation to retire from gas service about 1,168 miles of its Little Inch pipeline running from Baytown, Texas, to Moundsville, West Virginia.

The company proposed to construct a new pipeline to replace the existing one and to convert the retired facilities to the transportation of petroleum products. The certificate was conditioned upon adequate provision being made by the company for continued service to all of its customers.

Financing

The cost of the whole rearrangement, including the conversion of the Little Inch pipeline for oil transportation, was estimated at $101,000,000. The company proposed to finance this expenditure by issuing 3¾ per cent first mortgage bonds amounting to approximately $40,000,000, preferred stock in the amount of about $30,000,000, and debentures to sell for about $31,000,000.

After issuance of these securities, the estimated balances of the company's outstanding securities would include long-term debt of 62 per cent, preferred stock 13 per cent, and common stock and surplus 25 per cent. In view of the condition of the money market, the satisfactory trading of the company's securities, and other relevant considerations, the commission approved this program.

"Recapture" Provision

The Little Inch pipeline was subject by contract to recapture by the federal government for national defense use in the event of a national emergency. Since many customers and ultimate consumers depended on this line for gas service, the commission found it decidedly in the public interest to remove, if possible, the threat of disrupted service imposed by the possibility of recapture by the government. The replacement proposal of Texas Eastern provided a means of removing that threat.

Increased Operating Flexibility

While it was not contemplated that any future expansion of the company's gas system would result from the pipeline replacement, and although no additional service was proposed, it was shown, nevertheless, that the replacement facilities would afford greater operating flexibility in the system, enabling the company to maintain larger reserves and reduce costs. Evidence indicated that this saving, together with other minor adjustments, would increase the rate of return by approximately two-tenths of one per cent during the next four years. The commission otherwise found the proposed rearrangement of facilities to be feasible from an engineering standpoint.

Oil Business Competition

The motivating reason for the proposed

rearrangement of facilities was that Texas Eastern wished to enter the business of transporting petroleum products, using the Little Inch line for this purpose. None of the company's customers opposed the application, but other interveners sought to defeat it, urging the commission to consider the competitive aspects of their oil interests as opposed to the proposed operation of the Little Inch line for oil transportation.

Upon this aspect of the case, the commission declared that it was limited by the provisions of the Natural Gas Act to a very general examination of the effects of the proposed petroleum operations of the company, since the transportation of oil products does not fall within the purview of the act. It therefore refused to examine further than to gauge the impact of the new oil venture on the company, its customers, and the ultimate consumers solely from the standpoint of natural gas service. The commission was unable to discover any adverse effects and observed, in passing, that even if no more than operating expenses were earned from the oil transportation, the resulting reduction in the company's total income by reason of the conversion of the Little Inch line would be negligible.

Contentions of Interveners Rejected

Opposing interveners insisted that the commission entertain alternative proposals, that is, proposals other than the one submitted by Texas Eastern. The commission declined to do this, pointing out that under the Natural Gas Act it may either grant or deny a proposal contained in an application, but cannot require the applicant to construct and operate facilities pursuant to an alternative proposal, nor can it compel the applicant to submit alternative ones. Consideration of alternative proposals, therefore, would serve no purpose if the applicant chooses to abide by its own proposal.

The interveners further contended that any final order on the application should be deferred until a pending antitrust suit against the applicant should be determined. There being no evidence at hand of any violations of the antitrust laws, the commission disagreed. The normal workings of the administrative process, said the commission, cannot be delayed by the pendency of the antitrust suit, for otherwise, numerous lawsuits founded on mere allegations of antitrust law violations would be readily invited.

Other contentions of the interveners were similarly found to be without merit. They concerned the statutory standard of public convenience and necessity, the restriction of cross-examination, and the manner of conducting the hearing. *Re Texas Eastern Transmission Corp. Opinion No. 282, Docket No. G-2503, June 24, 1955.*

Use of Nonstandard Separations Formula Not Error

THE Idaho supreme court denied a telephone company request for a rehearing on a decision affirming the commission's denial of requested rate increases. The decision, reported in 8 PUR3d 265, held that the rates permitted would yield a return of about 5.71 per cent on intrastate property and, therefore, could not be considered confiscatory.

Basis for Rehearing

The company showed that the commission had been inconsistent in its treatment of "interest during construction" in earn-

ings and in "plant under construction" as a rate base item. The court agreed with the company and said that interest chargeable to plant under construction should not be included in earnings where "plant under construction" is eliminated from the rate base. The court did not consider this error reversible, notwithstanding the company's claim that this error, together with the commission's overlooking the effect of income taxes, seriously affected its earnings position. The court found in the commission's decision compensating items allowed in the company's favor to offset the error in the treatment of interest. Furthermore, the commission, the court said, took specific notice of the company's state and federal income tax obligations.

Telephone Separations

The company also contended that the commission's use of a method of separating telephone plant, revenues, and expenses other than the standard method known as the NARUC Separations Manual, denied the company a fair hearing. The court, in overruling this contention, pointed out that the case had been heard and reheard by the commission over a 2-year period, during which time all parties had ample opportunity to be heard.

Point of Confiscation

Dismissal of the rehearing application was based on the record presented and in the light of present economic conditions in which the point at which confiscation begins is lower than in some years past. All things considered, the court could not find that the company had carried the burden of proving confiscation or that the commission did not regularly pursue its authority. *Re Mountain States Teleph. & Teleg. Co. 284 P2d 688.*

Police Order Does Not Justify Telephone Service Denial

THE supreme court of Alabama reversed a lower court's dismissal of an action against a telephone company which had discontinued service to a subscriber. The company claimed that it had removed the telephone only after receiving an order to do so from the commissioner of public safety. One of the principal questions to be answered was whether or not the company was justified in accepting the police order as reasonable ground for believing that the phone was used for unlawful purposes.

Letters Concerning Discontinuance

The record of the hearing revealed the text of two letters which the court considered of noteworthy importance. The first was addressed to the district manager of the telephone company and was phrased in these terms: "This is your order to remove the attached list of telephones which are used for illegal purposes. These telephones are not to be reconnected without a court order or advice from me." The second letter, signed by the manager of the company and addressed to the subscriber, stated: "We have information which indicates that the telephone facilities and service being furnished you by this company have been used in connection with unlawful activities. Therefore, this is to notify you that on April 6, 1951, all telephone service at the present time being rendered to you at 1535—20th street, Ensley, will be discontinued."

Company's Rights and Duties

The court first restated the generally recognized proposition that the company

as the holder of a monopoly has the duty to serve the general public impartially and without discrimination. Subscribers' rights to service, the court continued, do not prevent a company from refusing to provide a service used for illegal purposes. The difficulty comes in determining the facts and circumstances which justify the company's discontinuing service on this ground.

After carefully examining many of the leading cases on the subject, the court decided that the decision of the New York court in the case of Shillitani *v.* Valentine (1945) 58 PUR NS 34, expressed a sound view which should be followed by the Alabama courts.

Effect of Police Request

The request or order of a police department, or one of its officials, is not in and of itself justification for discontinuing service. Such officials have no jurisdiction over the relationship between a telephone company and its subscribers. The New York court, in the Shillitani Case, further held that the company may not refuse service because of mere suspicion that the service may be used for unlawful purposes. An analysis of the facts in the case at hand indicated that the company's position was weaker than in the New York case.

Alleged Unlawful Activity

The record indicated only that an "order" had been received to discontinue service. The company felt that such order "clothed it with immunity." A note received from the police described the husband of the subscriber as "the operator of a negro beer joint" and stated that a number of lottery cases were pending against him.

The court said that, regardless of whether the first activity is laudable, it certainly is not criminal or even illegal. The action of the police in classifying the subscriber's husband as a criminal because of the pendency of the criminal cases against him aroused the ire of the court. The court made a stirring plea for adherence to the presumption of innocence in these words:

> The present tendency and drift towards the police state gives all free Americans pause. The unconstitutional and extra-judicial enlargement of coercive governmental power is a frigtening and cancerous growth on our body politic. Once we assumed as axiomatic that a citizen was presumed innocent until proved guilty. The tendency of governments to shift the burden of proof to citizens to prove their innocence is indefensible and intolerable.

Dissenting Opinion

In a strong dissent in which two other justices concurred, Justice Goodwyn took note of the line of reasoning followed by the majority but preferred to follow the line of another large number of cases holding that a utility is justified in discontinuing service when a responsible law enforcement official notifies it that a service is being used for unlawful purposes and requests its discontinuance. Such a rule was described as "reasonable and practicable."

Due Process of Law

Subsequently, on a rehearing application, the court discussed the constitutional question involved when a telephone company discontinues service upon giving notice in a letter of the type previously quoted. The court overruled the argument that "due process of law" affords protection only in criminal cases and found that the taking of subscriber's telephone without a hearing denied her due process.

The basic rights of the Constitution, the court concluded, can neither be disregarded nor "eroded away by the winds of an ever strengthening executive branch of the government." *Pike v. Southern Bell Teleph. & Teleg. Co. 81 S2d 254.*

No Temporary Injunction against Rate Ordinance When Even Small Return Earned

A TEXAS appellate court held that a trial court did not abuse its discretion in denying a temporary injunction pending action by a telephone company to enjoin enforcement of a rate ordinance. The record indicated that there would be a small net return under the ordinance. The court held "since this record shows a small net rate under the rate sought to be changed, that it was not shown to be confiscatory, and that a temporary injunction would not lie pending the final hearing."

It was observed that a temporary injunction merely preserves the status quo until final hearing and should go no further than equity requires. The court said that it is not the purpose of a temporary injunction to obtain the relief properly obtainable on a final hearing. Commenting upon the reasonableness of rates, the court said: "A rate may be unreasonable and may not yield a fair return upon the fair value of the property or investment and yet at the same time not be confiscatory. The undisputed record shows that there was a small net rate and if there is a net rate, the rate would not be confiscatory."

Presumption as to Reasonableness

Telephone rates fixed by a municipality are presumed to be correct. The court said that if the claimed invalidity rests upon disputed questions of fact, invalidity must be shown to the court's satisfaction. It held that what would be a reasonable return on the company's investment should not be determined upon an application for a temporary injunction pending action to enjoin enforcement of the rate ordinance. Furthermore, it pointed out, there was no showing that the purported rate increase which the company sought would not have produced more than the 8 per cent return permitted under the law. *General Teleph. Co. of the Southwest v. City of Wellington et al. 279 SW2d 922.*

Stockholders Must Exhaust Administrative Remedies Before Seeking Injunction

A FEDERAL district court held that minority stockholders were not entitled to enjoin the Alleghany Corporation, whose management claimed control of the New York Central Railroad System, from conducting certain proceedings before the Interstate Commerce Commission and to prevent the issuance and exchange of certain securities unless they had exhausted their administrative remedies. The question involved was whether Alleghany had control of the New York Central System and, consequently, was subject to the jurisdiction of the Interstate Commerce Commission.

The court held that the question should first be determined by the Interstate Commerce Commission and the courts reviewing its proceedings. It was considered a matter within the commission's particular

expertness. The stockholders had been denied the right to intervene in commission proceedings involving a merger of two components of the New York Central System. In that proceeding, however, the stockholders claimed no special interest in the merits. They desired only to raise the issue of jurisdiction. This, the court said, does not necessarily foreclose intervention where their interest is obviously substantial. The interests of minority stockholders in proceedings under §§ 5 and 20 of the Interstate Commerce Act must be considered and protected by the commission, it was said.

Finally, the court observed, an adequate legal remedy is available to the stockholders in the form of judicial review when the commission proceedings are finally terminated. When interests of minority stockholders, as distinguished from those of the corporation, are affected by a commission order, they have standing to review the order. This remedy is available even though they fail to intervene or were denied intervention in the proceedings.

Lack of status as interveners does not preclude standing to review where the court is satisfied that the parties have a protectible legal interest. Furthermore, their right to challenge the commission's jurisdiction cannot be estopped by management's acquiescence to unauthorized regulation. The stockholders must, however, exhaust their administrative remedies. In view of this the court held their application to be premature. *Breswick & Co. et al. v. Briggs et al. 130 F Supp 953.*

Rehearing Denied on Nonsuspension of Rate Increases under Natural Gas Act

THE commissions of Virginia, Maryland, West Virginia, and the District of Columbia applied to the Federal Power Commission for a rehearing respecting its order denying their joint petition for the suspension of certain rate schedules filed by independent natural gas producers. The schedules had already become effective under the provisions of the Natural Gas Act. Finding that no new evidence was presented in support of a rehearing, and no new principles of law having been brought to light, the commission denied the rehearing.

Suspension Power Discretionary

The petitioners urged that the failure of the FPC to suspend the rate schedules when filed constituted an abuse of discretion. The FPC disagreed. It observed that § 4(e) of the act confers a clearly discretionary authority upon the federal commission to suspend proposed rates, and if the suspending power is not exercised in a particular case, such action does not become suspect merely because it is challenged. The burden, therefore, fell upon the petitioners to show wherein the discretionary authority was abused. This they wholly failed to do.

The Notice Provision

The petitioners further argued that they were deprived of an opportunity to file a complaint against the proposed increases by reason of the fact that they were not given the thirty days' notice which, they asserted, is "contemplated" by § 4(e). The FPC pointed out that although the act requires notice, notice is to be given not by the commission, but by the independent natural gas producer by "filing with the commission" and "keeping open for public inspection" the new schedules.

Moreover, under the last sentence of this section the commission may permit rate changes to go into effect without any notice to the public, if circumstances warrant. In the event such notice is thus waived, the "right" to file a complaint, claimed by the petitioners under this section, must yield.

Remedies Confused

These considerations, said the FPC, made it plain that the petitioners had mistaken their remedy. They confused the "limited and transitory rights" under § 4(e), to be heard in opposition to proposed rate increases, with the rights conferred by § 5(a). Once the increases have become effective, as was the case here, they cannot then be suspended or their reasonableness challenged except as provided in § 5 of the act, which requires a hearing and appropriate findings. *Re Virginia State Corp. Commission et al. Docket No. G-8558, June 16, 1955.*

Similar action was taken with respect to a petition by the commissions of Massachusetts, Connecticut, New Hampshire, and Rhode Island. The commission also considered a complaint that Tennessee Gas Transmission Company had indicated it would notify parties of proposed filings by independent producers supplying Tennessee. The commission said that this did not impose upon the commission duties respecting notice additional to those required by the Natural Gas Act. *Re Virginia State Corp. Commission et al. Docket No. G-8558, June 23, 1955.*

Spur Track Crossing Required at Separate Grades

THE Virginia supreme court has affirmed a decision of the commission requiring a railroad company to construct a spur track crossing of a highway at separate grades, if any crossing were constructed at all. The railroad insisted upon crossing the highway at grade and contended that the commission's decision was unreasonable and without supporting evidence.

The Evidence

The policy of the state, as explicitly expressed by statute, requires separate level crossings rather than grade crossings whenever practicable. The highway sought to be crossed is the principal connecting road between Richmond and Hopewell, and affords a connecting link between Richmond and the Norfolk area. Traffic over this highway has increased rapidly during recent years and a further increase is anticipated because of industrial development in the area. The site of the proposed crossing is subject to frequent fogs. Other circumstances likely to delay traffic at a grade crossing of this highway were shown. From these facts the commission said it was clear that a grade crossing would render the highway "less safe and convenient" for motor vehicle traffic.

Cost Not Unreasonable

The cost of constructing an underpass was estimated to be $68,000 as against about $6,500 to construct a grade crossing. The commission was of the opinion that the difference between the two figures was not unreasonable. Furthermore, the railroad offered no evidence that the cost of an underpass would be out of proportion to the revenues it might anticipate from the operation of the spur track.

Upon the whole record, the court decided there was ample evidence to sus-

tain the order requiring the crossing at separate grades. *Seabord Air Line R. Co. v. Board of Supervisors of Chesterfield County et al. 87 SE2d 799.*

Sale of Telephone Exchanges Approved

THE Oklahoma Arkansas Telephone Company applied to the Oklahoma commission for authority to sell certain exchanges to the Holt Telephone Company. Permission was also sought to increase rates.

The commission noted that the exchanges were badly run down and in need of capital expenditures and improvements. The standard of service was below par. The buyer intended to make improvements in plant equipment and service and was capable of owning and operating the properties.

The sale was approved and the commission required that a certain portion of the purchase price be set up in a plant acquisition account by the buyer and not be included in the capital account.

The additional revenues sought were authorized. A return of 6.2 per cent would result from the increase, which the commission felt was adequate. The order contained the proviso that two of the exchanges would be converted to dial operations within eighteen months. If the dial conversion were not completed within that period, the rates at the two exchanges would revert back to those being presently charged. *Re Oklahoma Arkansas Teleph. Co. Cause No. 20930, Order No. 30599, July 26, 1955.*

Rate Agreement Attached to Street Use Authority May Be Withdrawn

THE supreme judicial court of Massachusetts permitted a telephone company to withdraw discount rates at which the company had contracted to serve a municipality. The mayor and aldermen of Brockton, Massachusetts, had approved the company's extension of its lines and conduits only after the company had contracted to provide reduced-rate service.

The lower court had found the rate valid and proper but the higher court disagreed. The statute which gave city officials authority over the erection and maintenance of utility lines on city streets did not confer any rate-making authority. The agreement which the city exacted from the company in exchange for its authorizing the use of city streets for the extension of telephone conduits was void, the court held, and could be withdrawn. *New England Teleph. & Teleg. Co. v. City of Brockton, 127 NE2d 301.*

Authority to Issue Securities to Purchase "Potential Values" In Carrier Partnership Denied

THE California commission authorized the transfer of a one-half interest in a motor common carrier partnership to a corporation similarly operating as a highway common carrier. From the point of view of the public interest, the commission found no objection to the entrance of the corporation into the operation of the part-

nership business, but the financing of the transaction presented a difficulty.

Proposed and Authorized Financing

The purchase price of the one-half interest was agreed upon for the sum of $12,500, of which $2,500 was to be paid from funds on hand, $1,500 from the sale of the corporation's stock, and a 3-year note was to be given for the remaining $8,500. The commission was then asked to authorize the issuance of securities having a total face value of $10,000 in part payment for assets, exclusive of the partnership's good-will account, having a maximum book value of only about $3,000.

The difference between these two figures represented a proposed capitalization of potential earning power. But this item, the commission ruled, does not form a proper base upon which a utility can be authorized to issue securities. Therefore a proposed long-term note representing this potential value was not authorized.

The corporation was, however, granted authority to issue stock for the assets transferred. The purchaser could, in its discretion, use available cash and incur current liabilities to pay the agreed sum without obtaining authority from the commission.

Operative Rights in Rate Fixing

The commission warned the applicants that operative rights, as such, do not constitute a class of property which may be capitalized or used as an element of value in rate fixing except to the extent of payments to the state for the grant of such rights. *Tunzi et al. (Salinas Valley Freight Line) Decision No. 51183, Application No. 35678, March 8, 1955.*

Telephone Exchange Area Boundary Strictly Maintained

THE North Carolina commission was asked by a small rural community of subscribers to compel a telephone company to serve them through the Reidsville exchange rather than through the established facilities for the Monticello exchange area where the petitioners lived. Citing the paramount needs of the majority of telephone users in the whole area, the commission denied the petition.

The Evidence

The petitioners lived on the boundary line between the Monticello and the Reidsville exchange areas, and the telephone lines to Reidsville stood only 300 yards from the petitioners' community. They alleged that nearly all their economic and social ties were with Reidsville, and as the exchange arrangement then existed, they were charged toll fees for calls to that city.

The company showed that the Monticello exchange, serving this small group of petitioners, had been established in conformity with the wishes and needs of the majorty of the people in the area, and that the engineering requirements of the existing facilities did not readily permit of the requested rearrangement. Evidence further indicated that only a minute percentage of the calls made in the Monticello area were being placed to Reidsville.

Certainty of Boundary Necessary

The commission declared that once an exchange area has been established after duly consulting the wishes of the majority of the people concerned and the engineering requirements involved, it then becomes essential to adhere strictly to such boundaries.

If the policy were otherwise, the opinion stated, there would soon be such a duplication of facilities and conglomer-

ation of intermingled service that all order and system in the establishment of exchanges and exchange areas would be destroyed, to the detriment of the public. The commission therefore ruled that the special convenience of these few petitioners must yield to the overwhelming public necessity. *Re Southern Bell Teleph. & Teleg. Co. Docket No. P-55, Sub 115, August 3, 1955.*

Other Recent Rulings

Higher Rates to Nonresidents. The Georgia supreme court held that a city ordinance fixing higher water rates for nonresidents than for residents was not violative of the state or federal Constitution, where the city charter authorized the city to own and operate its waterworks system and to supply water to residents and nonresidents. *Messenheimer et al. v. Windt et al. 87 SE2d 402.*

Review of Commission Order. The Ohio supreme court would not substitute its judgment for that of the commission and hold that an order in a hotly contested controversy filled with sharply conflicting evidence was unreasonable or unlawful as long as there was some evidence to sustain the commission's findings. *Ohio Steel Foundry Co. v. Ohio Pub. Utilities Commission, 164 Ohio St 9.*

Buffer Zone Established. The Oklahoma commission held that a neutral or buffer zone should be established within an area disputed by two telephone companies wherein all the present subscribers would be permitted to retain the service they had chosen and new subscribers obtain the service of their choice. *Foss Teleph. Co. v. Farmers Teleph. Co. Cause No. 20946, Order No. 30535, July 14, 1955.*

Magneto Service Discontinued. A telephone company proposing to convert to dial operation should not be required, according to the Oklahoma commission, to maintain manually operated magneto service solely for the benefit of rural subscribers, where such subscribers could improve their facilities to conform with the applicant's improved plant and thus obtain modern automatic service at a small initial cost and a nominal monthly charge. *Re Robertson (Hydro Teleph. Co.) Cause No. 20989, Order No. 30593, July 22, 1955.*

Crossing Cost Apportionment. The Wisconsin commission refused to compel a railroad to bear the entire cost of reconstructing a bridge separating a highway crossing from the rail bed, where there was no evidence that the highway had ever been formally dedicated to the public use or had been in existence for a sufficient time prior to the laying of the tracks as to result in prescriptive rights. *City of Eau Claire v. Chicago, St. P. M. & O. R. Co. 2-R-2824, July 18, 1955.*

Telephone Company Sale. The Missouri commission, after pointing out that its approval was required for a sale by a telephone company of its plant, franchise, and system, approved such a sale where all the available information indicated that the transfer would not be inconsistent with the public interest. *Re Eppard (Goodman Teleph. Co.) Case No. 13150, June 21, 1955.*

Economic Interest. The fact that an In-

terstate Commerce Commission order adversely affects a carrier's economic interest, held the United States district court, is not a ground for denying the validity of the order. *Seaboard Air Line R. Co. v. United States, 131 F Supp 129.*

Immaterial Rate Change. The Wisconsin commission does not consider it necessary to determine a rate base and a rate of return when a utility desires to change its rates in such a way as will not materially affect its earnings. *Re Wisconsin Power & Light Co. 2-U-4417, July 25, 1955.*

Effect of Prior Revocation. The Missouri commission treated an application for a common carrier certificate, made by an applicant whose previous certificate covering the same service had been revoked, as if the previous certificate had never been issued, and public convenience and necessity was determined from conditions existing at the time of the hearing. *Re Smith, Case No. T-12106, July 26, 1955.*

Track Abandonment. The fact that a railroad failed to comply with a statute prescribing the only method open to the railroad for abandonment of tracks, held the Texas court of civil appeals, did not preclude the railroad from bringing an action for a declaratory judgment to determine its right to remove the tracks, where the statute setting forth the method of abandonment was applicable only to connecting links between separate localities and not to mere service or auxiliary tracks. *U. S. Coffee & Tea Co. v. Texas & P. R. Co. 280 SW2d 290.*

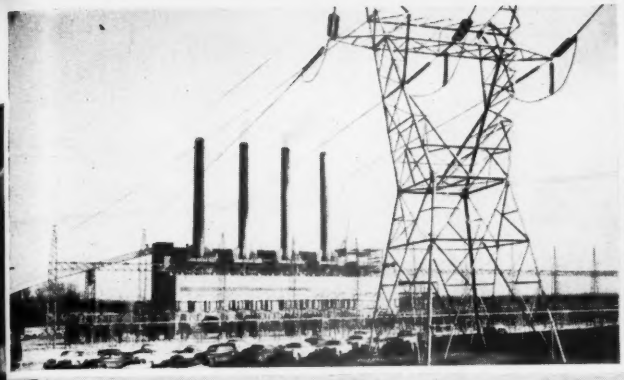
Motor Carrier Rights. The Mississippi supreme court held that no pick-up or delivery rights on a highway already served by a protesting motor carrier should have been granted to an applicant, except as to freight originating in or destined to the area covered by the permit granted him to serve another highway. *Garrett (Garrett Truck Line) v. Delta Motor Line, 81 So2d 245.*

Commutation Fares Increased. The Pennsylvania commission authorized certain railroads to increase commutation fares where the increase was reasonable and nondiscriminatory and would not produce an excessive rate of return. *Pennsylvania Pub. Utility Commission v. Baltimore & O. R. Co. Complaint Docket Nos. 16376-16379, 16382, June 27, 1955.*

Water Company Return. The Wisconsin commission considered a return of approximately 5 per cent fair and reasonable for a water company. *Re Cudahy Water Works Co. 2-U-4381, July 25, 1955.*

Investment Rate Base. The Wisconsin commission was of the opinion that a rate base computed from average investment in plant, less depreciation reserve, plus materials and supplies, was fair and reasonable for a telephone company. *Re Mondovi Teleph. Co. 2-U-4415, July 25, 1955.*

Crossing Relocation. A railroad should not be required to bear the full cost of cattle guards, crossing planks, reflectorized crossing signs, and changes in facilities, held the Missouri commission, where a relocation of a crossing is made necessary, not from any peculiarity with respect to the location of the rail line, but from the terrain over which the present road is located. *Missouri State Highway Commission v. Thompson (Trustee) Missouri P. R. Co. Case No. 12996, July 14, 1955.*



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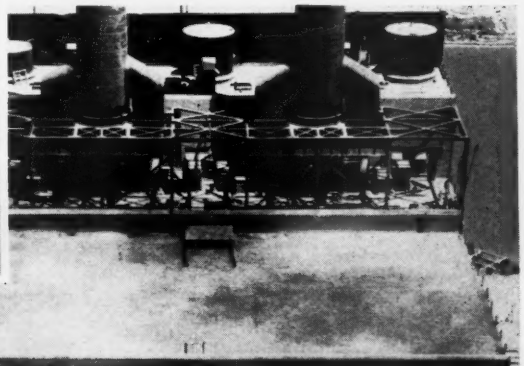

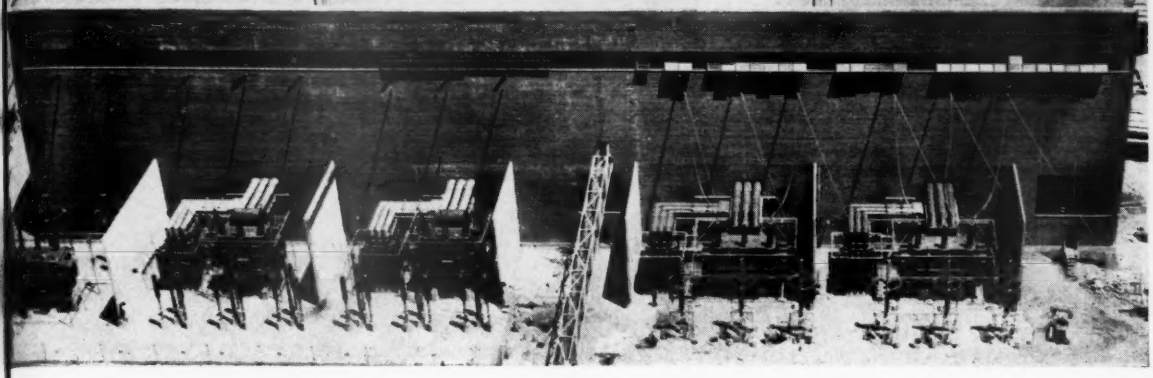

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Industrial Progress

Puget Sound Power & Light Plans $79 Million Expansion

PUGET Sound Power & Light Company reports that construction expenditures previously estimated at around $7 million for 1955 are now placed at about $9 million due to an increased volume of new business and the inclusion this year of about $750,000 of the cost of the company's new buildings. It is estimated that the 1955-59 program will cost $79,000,000.

Total kilowatt-hour sales in the first six months of 1955 were 12.7 per cent over the same period of 1954, according to Frank McLaughlin, president, and the average use of all residential customers reached a new all-time high of 6,189 kilowatt-hours for the year ending June 30, 1955.

Commonwealth Edison Sets New Peak Demand Record

COMMONWEALTH Edison system set an all-time record on August 18th when demand for electricity in the Chicago and northern Illinois area reached a new peak.

Willis Gale, Edison chairman, said preliminary figures indicate the demand during the early afternoon of that day exceeded the 3,300,000 kilowatt mark for the first time in the company's history. The previous peak was 3,284,000 kilowatts established on December 22, 1954.

Heavy demand for air conditioning due to the hot weather, plus a high rate of use for industrial, commercial and residential purposes were responsible for the record, Mr. Gale said.

With the system's 3,742,000 kilowatts capacity reduced by nearly 600,000 kilowatts because of units out of service for overhaul, repairs and other limitations, Edison found it necessary to buy power from neighboring utility systems to meet the demand during the peak hours.

Industrial "Whodunit" Issued By Hall Laboratories

"FACT-Finding Laboratories," the last in a series of 16 water treatment folders issued by Hall Laboratories, Inc., Pittsburgh, Pa., summarizes the work of the industrial water consultant, comparing him with a detective.

Field engineers are backed by extensive and elaborate equipment in "Scotland Yard"-type laboratories, which aid in the solution of all types of water problems, the new literature points out.

Devices used include X-ray apparatus with a direct recording Geiger counter diffraction unit, spectrophotometers, flame photometers, and metallographic microscope.

Examples of "water detective" work handled by Hall bear these titles: "A Strange Case of Sulfide," "The Hard Sludge Mystery," and "The Singular Strontium Affair."

New literature is available free of charge from Hall Laboratories, Inc., 323 Fourth Ave., Pittsburgh, Pa.

Neptune Acquires Gas Meter Firm

NEPTUNE Meter Co., manufacturer of liquid meters for use by municipalities and industries, has expanded its operations to include a line of gas meters for municipal and privately operated gas utilities.

D. E. Broggi, president of Neptune reported the acquisition of Superior Gas Meter Co., of Brooklyn by Neptune last month.

Superior Meter Company manufactures gas meters for residential, commercial and industrial use. It was founded in 1912.

Wentworth Smith, vice president of Neptune, has become president of Superior with Gabriel Powers as vice president and general manager. The gas meter firm will continue as an independent wholly-owned subsidiary of Neptune.

Mr. Smith said affiliation with Neptune will permit expansion of Superior's gas meter line and broadening of its market area and service to gas utilities.

New Lighting Promotion Awards Announced by EEI

LIGHTING Promotion Awards for electric utility lighting sales promotion activities have been announced as an addition to the Awards presented annually at the Edison Electric Institute Sales Conference.

The Awards are an outgrowth of the Planned Lighting Awards which were discontinued this year. They are to be administered by the Prize Awards Committee of the Institute and are sponsored by the Lamp Divisions of the General Electric Company, Sylvania Electric Products, Inc. and the Westinghouse Electric Corporation.

Purpose of these new awards is to recognize outstanding lighting sales promotional activities in the following divisions: the Residential Lighting Division and the Commercial-Industrial Lighting Division. The winning company in each of the two divisions will receive an attractive bronze plaque.

(*Continued on page* 28)

A company may submit entries both in the Residential Division and the Commercial-Industrial Division. Entries in the Commercial-Industrial Division may cover commercial lighting activities or industrial lighting activities or a combination of both.

All operating electric light and power companies whether or not members of Edison Electric Institute, in the United States, its possessions and Canada, are eligible to enter.

Activities conducted during the twelve month period ending December 31, 1955 are eligible for inclusion in the entry.

Factors which will be considered by the judges are: organization and methods, advertising and promotional activity, cooperative activities with allied industry, either direct or through electric leagues and associations, and results.

Further information can be secured from the Secretary, Prize Awards Committee, Edison Electric Institute, 420 Lexington Avenue, New York 17, N. Y.

Delta-Star Electric Division Appoints Works Manager

THE appointment of Frank Soles as works manager, in charge of all plant operations at Delta-Star Electric Division, H. K. Porter Company, Inc., has been announced by Delta-Star's vice president and general manager, C. S. Beattie.

Other divisions of the H. K. Porter Company, Inc., are Alloy Metal Wire, Connors Steel, Eseco, Laclede-Christy, Leschen Wire Rope, The McLain Fire Brick Co., Quaker Pioneer Rubber Mills, Quaker Rubber Corporation, Riverside Metal Company, Vulcan Crucible Steel Co., The Watson-Stillman Company and Watson-Stillman Fittings.

Home Lighting Fact Sheet Published by Lighting Institute

A 10,000-word "Writer's Fact Sheet on Home Fixture Lighting" has been published by the American Home Lighting Institute, presenting a simple-worded digest of technical and decorative information on home fixture lighting.

Originally intended as a guide for writers and editors, the fact sheet is also being used for speakers' outlines, as a home economist teaching aid, and for sales training purposes by utilities, manufacturers, and others.

Copies can be obtained from the

(*Continued on page 29*)

American Home Lighting Institute, 542 S. Dearborn St., Chicago 5, Ill., at 50 cents per copy for quantities under 10, 25 cents each for more than 10 copies.

Divco Corp. Introduces "Dividend Series" Trucks

DIVCO Corporation, said to be the world's largest manufacturer of complete house-to-house delivery route vehicles, recently announced that it has begun the manufacture of a new "Dividend Series" truck. Pilot model of this complete line of larger, newly-engineered trucks was unveiled recently at a press conference at the Divco plant, 22000 Hoover Road, Detroit 5, Michigan.

G. E. Muma, president of Divco Corporation, stated that the announcement of this new store-to-store and multi-stop delivery vehicle marks a milestone in the company's history as Divco will be entering an entirely new field of numerous new markets.

"As far as we know," said Roy H. Sjoberg, vice president in charge of sales for the company, "this is the first time that a complete truck with all these features has been designed specifically for the multi-stop delivery of items other than milk. Since 1927 Divco has built a reputation in the manufacture of retail delivery trucks and I would estimate that nearly 75 per cent of all house-to-house milk trucks in the country are Divcos. Many smaller Divcos are currently in the bakery, laundry and dry cleaning fields." The new truck is much larger and is engineered to meet all the requirements demanded for the store-to-store and door-to-door delivery operation including retail and wholesale delivery of electric appliances.

Recent developments, prior to the unveiling of the new truck, include erection of several additional buildings for increased manufacturing capacity, setting up of new machinery and expansion of assembly line facilities. The company has also undertaken a policy of manufacturing more component parts of the trucks. In addition, increased sales and advertising efforts have resulted in a nation-wide dealership expansion which has resulted in record-breaking sales for the first half of the fiscal year.

Among the advantages claimed for the new "Dividend Series" are: Greatest cargo capacity for the minimum occupancy of street or garage space; Smoother riding vehicle; Greater ma-

(*Continued on page* 30)

neuverability; Increased visibility and streamlined styling; Greater accessibility to engine and transmission for maintenance; Extra rugged chassis; Adaptability to an unusually wide range of optional features; Greatest possible freedom from corrosion; and Improved roadability at all speeds.

Ohio Edison Acquires New Plant Site

APPROXIMATELY 400 acres of land along Lake Erie near Beaver Park have been acquired by Ohio Edison Company for possible future development as a power plant site, the Company announced recently.

Additional property of approximately 550 acres extending about two miles south from the plant site has been acquired for right-of-way for possible future transmission lines.

Ohio Edison is currently building an addition to its Edgewater power plant in Lorain, where a 90,000-kilowatt steam-electric generating unit will be installed ready for use in 1957. Last month the Company announced that its subsidiary, Pennsylvania Power Company, would build a 90,000-kilowatt addition to its power plant at New Castle, Pennsylvania, scheduled for operation in 1958.

Wisconsin Electric Power Plans Fourth Unit at Oak Creek

WISCONSIN Electric Power Company reports that construction work on a third 120,000 kilowatt generating unit at the company's Oak Creek power plant is entering its final stages. It is expected that the new unit will be in service early in the coming winter.

Approval of the Public Service Commission has been requested for the construction of a fourth unit at Oak Creek to be completed sometime during the winter months of 1957-58. Installation of this unit will complete the original plan announced in 1950 which contemplated a capacity of 500,000 kilowatts at Oak Creek within the current decade.

Rust Names Frank L. Wilhelm Assistant Vice President

FRANK L. WILHELM has been elected assistant vice president of The Rust Engineering Company, it was announced recently.

Mr. Wilhelm joined the Rust organization in 1936 as a field office manager, and later served as superintendent on a number of the company's major construction projects. In 1949 he was promoted to project manager.

His most recent field assignment was procurement manager for the company's large construction project at Oak Ridge, Tennessee.

Mr. Wilhelm will make his headquarters in The Rust Engineering Company's home office in Pittsburgh where he will handle operational duties in connection with the company's activities.

J. V. McGuire Named Manager A-C Switchgear Department

J. V. McGUIRE, sales manager of Allis-Chalmers switchgear department since 1953, has been promoted to department manager, according to an announcement by J. W. McMullen, vice president and general manager of the firm's power equipment division.

McGuire joined Allis-Chalmers in 1950. He was associated with the company's transformer, motor-generator and switchgear departments before becoming manager of the substation section in 1952.

Combustion Engineering Personnel Changes

DONALD S. WALKER, vice president and director of sales of Combustion Engineering, Inc., has announced the following promotions:

Carmine J. Grossi from assistant general sales manager to manager of the export division.

Frank J. Bader formerly district manager at San Francisco to assistant general sales manager in New York.

Herman C. Reichard from the Kansas City sales office to district manager in San Francisco.

Gen. Tel. of S. W. Increases Construction Program

A MID-YEAR review of the 1955 construction program indicates that General Telephone Company of the Southwest will spend the largest amount of money for construction in any one year in the company's history. Over $8,500,000 will be required to complete the work planned this year which is an increase of more than $550,000 over the original budget.

Gross expenditures for the 1955 revised construction program have been allocated in the following manner; 2 per cent to land and buildings, 25 per cent to central office equipment, 37 per cent to station equipment, 33 per cent to outside plant and 3 per cent to miscellaneous equipment, including furniture and fixtures, vehicles, and other work equipment.

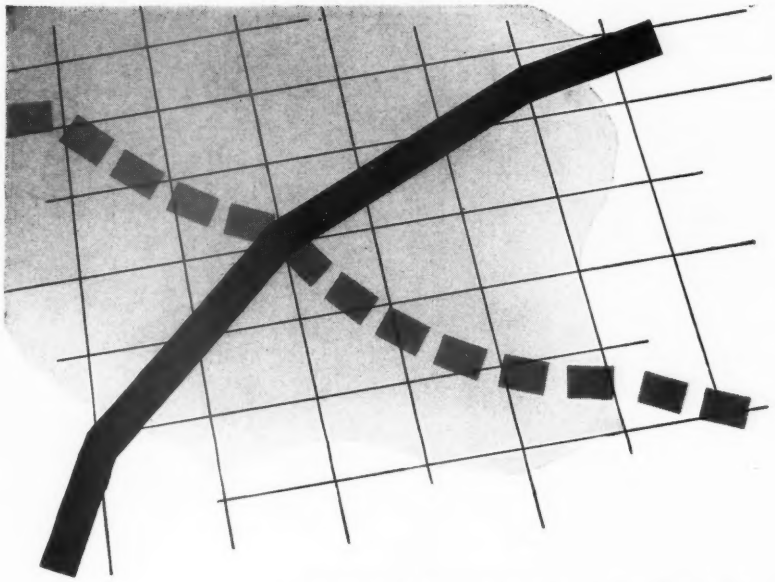
The expenditures vary among the several Divisions, depending upon the nature and necessity of their requirements. Expenditures are allotted: 15 per cent to Central Division, 22 per cent to Eastern Division, 9 per cent to Northern Division, 27 per cent to Southern Division and 27 per cent to Western Division.

Good Results from CP&L Industrial Development Program

FIFTEEN new and 29 expanded industrial plants, representing new capital investment of $14,613,000, picked sites in the area served by Carolina Power & Light Company during the first half of 1955.

In reporting this D. E. Stewart of CP&L's industrial development department also said that the new and expanded plants will add 2,282 new jobs and increase annual payrolls by $5,804,500. These figures are exclusive of the Air Force's reactivation of the $22,600,000 Seymour-Johnson Field near Goldsboro.

New industrial enterprises are well distributed over the area, Mr. Stewart said, and smaller Carolina communities are well represented. A continuing pattern of highy diversified, small local industry is noted.



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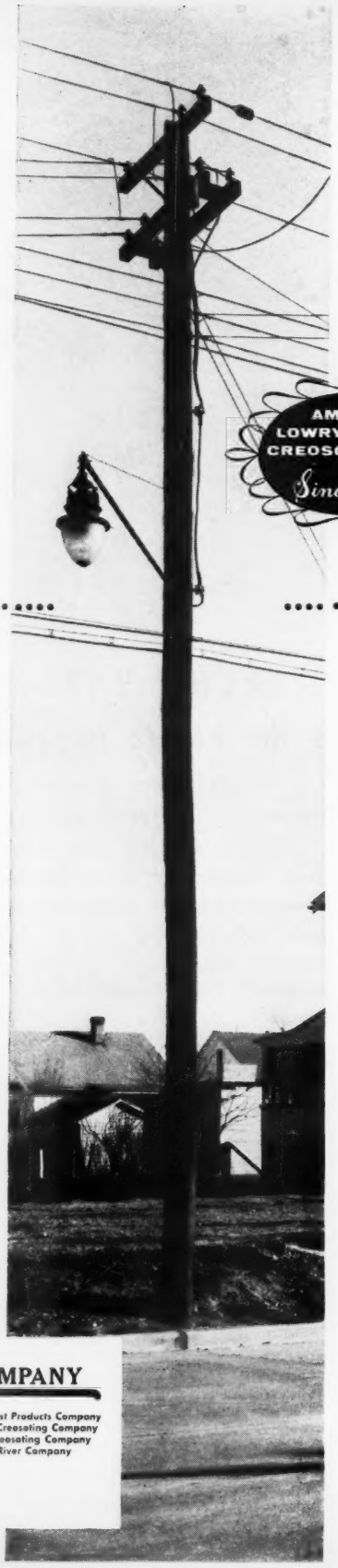

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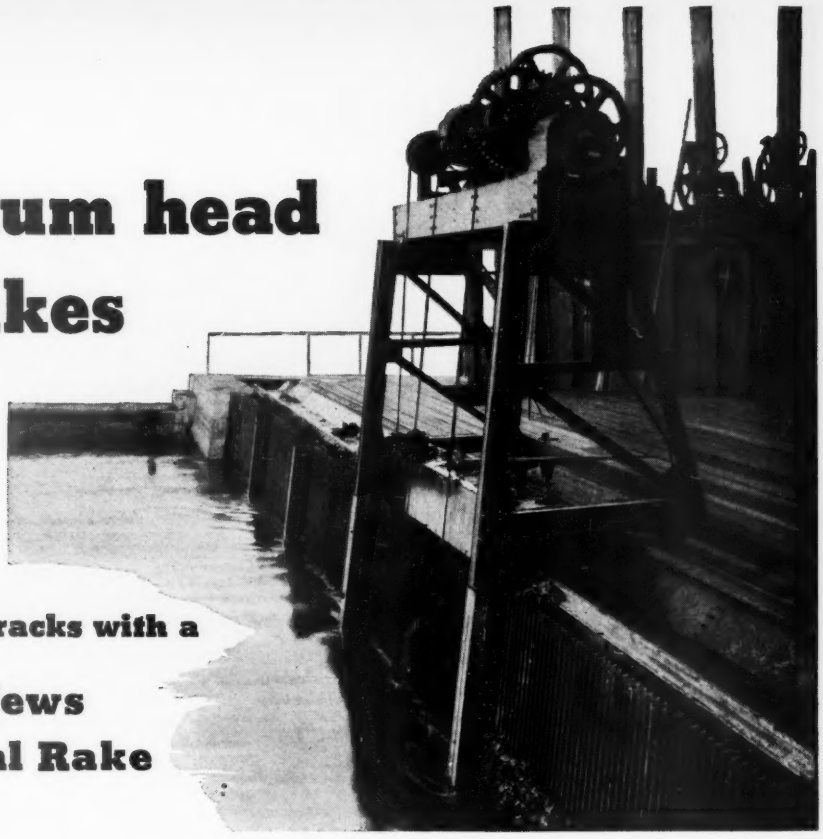

...by cleaning your racks with a

Newport News Mechanical Rake

Keeping racks clean is essential wherever a few inches of head loss can reduce output of the wheels.

One company calculated the capitalized value of each inch of head gained at its plant as $6,000. Measured in terms of the value of additional power output, a Newport News rack rake installed at this plant is paying for itself over and over again the year 'round.

Power-operated to clean trash racks at water intakes of hydroelectric plants, steam plants, pumping stations, canals and similar installations, the Newport News Mechanical Rack Rake reduces a major hand-labor task to one of minor periodic activity.

Under ordinary conditions, one man per shift can, with a Newport News Mechanical Rack Rake, keep the racks clean for a dozen bays.

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• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction.

(Professional Directory Continued on Next Page)

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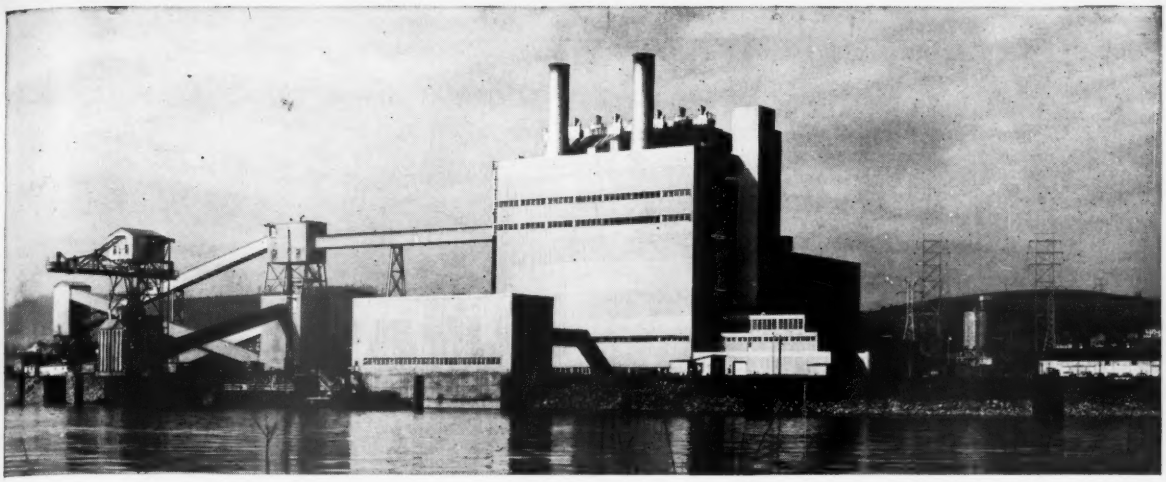
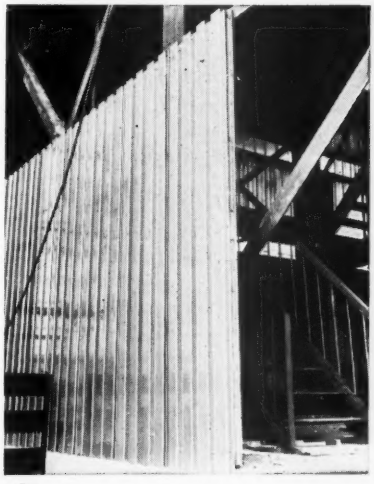


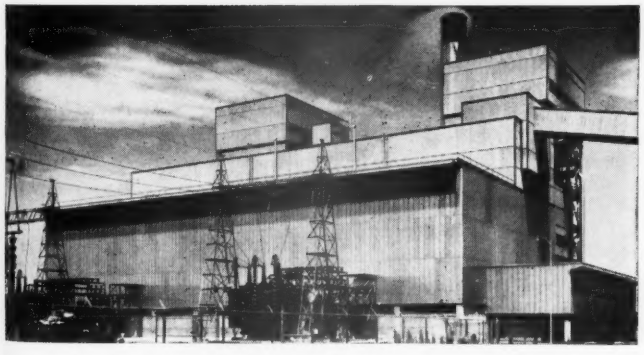
Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.

Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12″ masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.

Robertson

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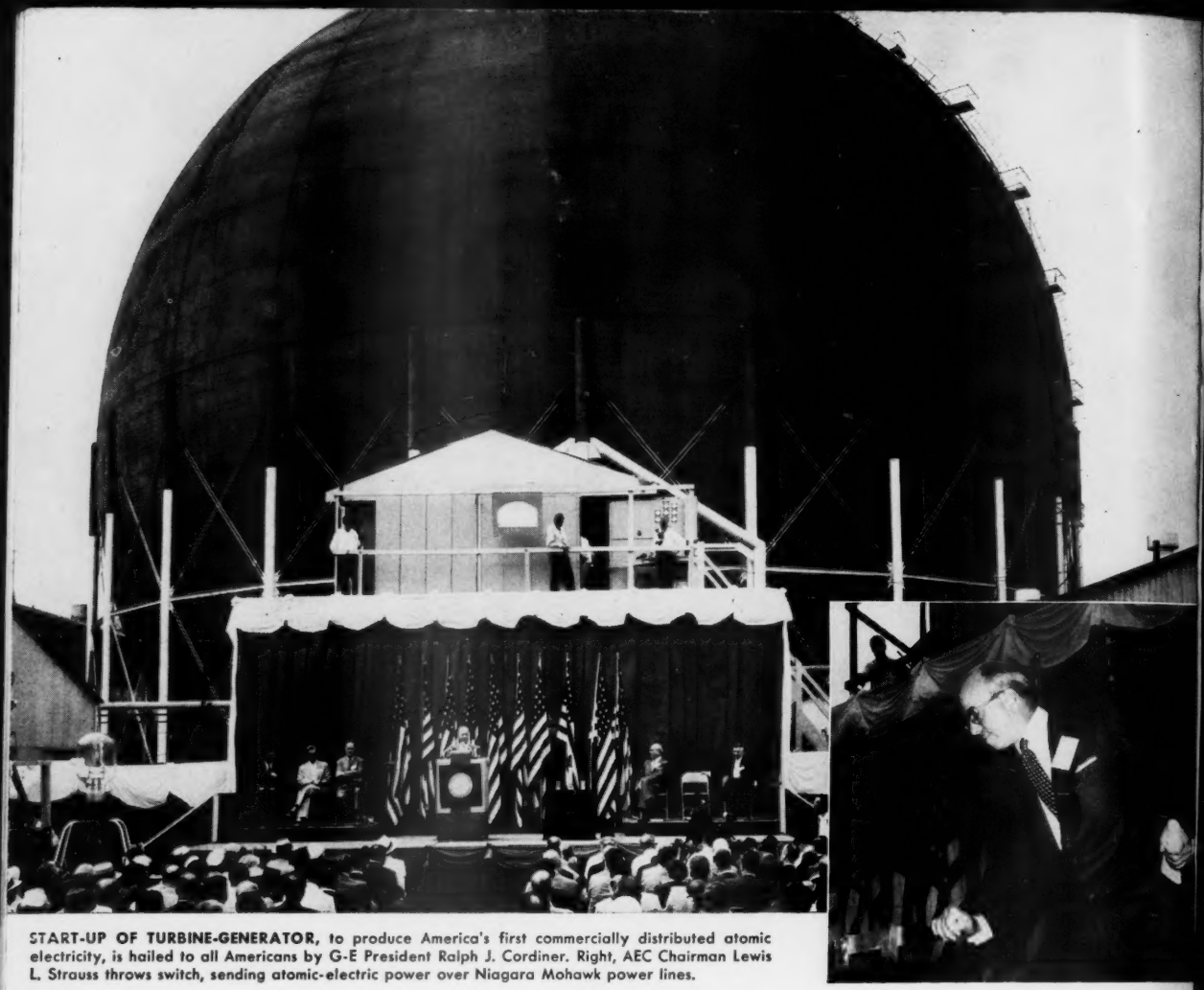

START-UP OF TURBINE-GENERATOR, to produce America's first commercially distributed atomic electricity, is hailed to all Americans by G-E President Ralph J. Cordiner. Right, AEC Chairman Lewis L. Strauss throws switch, sending atomic-electric power over Niagara Mohawk power lines.

World's first commercially distributed atomic-electric power

Gives public first glimpse of atomic future

ATOMS FOR PEACE conference, Aug. 8–20, found General Electric scientists ready to pool their knowledge in Atomic energy. At Geneva, G-E model of the Commonwealth Edison dual-cycle power plant showed the world how far American business firms have progressed in atomic energy.

The American people got a preview of what is to come in electric utility operations when, for the first time, commercially available atomic-electric power was generated by General Electric and released by the Atomic Energy Commission over the lines of the Niagara Mohawk Power Corporation on July 18, at West Milton, N. Y.

In co-operation with the A.E.C., G.E. is operating the 10,000-kw station at its own expense. Steam is supplied by the A.E.C.'s Submarine Intermediate Reactor prototype, constructed by G.E. for the Navy's Submarine *Seawolf*.

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West Milton offers a graphic demonstration to the public that tremendous progress already has been made in harnessing the atom for peacetime employment. It also spotlights the significant role private industry can play in atomic development.

At G.E., over 13,000 are now actively engaged in projects for military and peacetime atom progress. Work is under way to help Commonwealth Edison fulfill plans for a 180,000-kw atomic-powered generating station, largest all-nuclear plant yet scheduled. It is in such work by companies ready to risk major investments that America's leadership in atomic progress can be sustained. For more information, contact your nearest G-E Apparatus Sales Office. General Electric Company, Schenectady 5, N. Y. 301-292A

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